

October 1951

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Infantry Journal • Field Artillery Journal

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COVER: White phosphorus falls on Communist positions in Korea.
Department of Defense photograph by Signal Corps combat photographer.

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TO THE EDITOR

Combat Pay—and Better Public Relations

To the Editors:

Your editorial on the \$1,000 reward, in the last issue, was excellent. Here's hoping no one gets it. As an Infantryman I am with you as far as the combat pay is concerned. Not only because it is a hazardous duty, which it certainly is, but primarily because other services and some of the branches within these services are getting it.

The matter of combat pay is a subject of continual discussion here at this amphibious base. We have a mixture of practically all the services, including the underwater demolition units (who receive extra pay), the submarine people (who also do), and of course the Air Force, Marine and Navy flying personnel (who get it, too).

Belief that the Infantryman in combat should get combat pay is shared by all of these people. Most of us have also agreed that if the combat man does not get his well earned combat pay, none of the others should, and particularly not those who now get flying pay and do administrative work. I know of many Air Force officers who, since the end of the last war, have been collecting flying pay when actually they have never been in combat and never will be because they are already too old to fly. One Air Force colonel, now with the Psychological and Propaganda Branch, told me that he hopes he will be able to stay with that branch because he doesn't want to go into combat. Ever since his promotion to colonel several years ago, he has been doing odd administrative jobs, breaking away just now and then to get in his flying time.

One officer with wings thought that flying pay is not actually intended for the hazards of flying, but that it is given for the special skill, and as an attraction to get the cream of the crop to join the flying services. I think that he and many others believe that no particular skill is needed on the front line. They do not somehow conceive that even more skill is requisite there than the pilot uses in his cockpit.

I'll ask further why a person in a UDT should get hazardous duty pay? The UDT's say that they get it for the danger of swimming about in enemy waters, obtaining various types of information, blowing up underwater obstacles and making reconnaissance in general. But such jobs usually last a few hours at a time over a few days before D-day or during D-day operations. Before and after these haz-

ardous missions the UDT's enjoy a life of ease aboard some ship. But the soldier on the front may be continuously exposed to danger. And he endures other rigors the UDT's are seldom if ever exposed to. Which of two jobs is really more dangerous? That's simple. The answer lies very plain to see in the casualty figures.

It is perhaps true that on the percentage basis our submarine service had more casualties in the last war than any of the other services (that's what the submariners say). Yet of all the numerous submariners I have asked whether they would swap jobs with combat soldiers, I've found no takers at all. In my opinion, life aboard a submarine is not dangerous at all. And the living is certainly far better than most in the Army. The food is usually fresh and well prepared. The submarine seldom stays away from port more than sixty days. The biggest trouble they apparently have (from the talk I've heard around here) is in flushing their toilets. But let them have their extra money for hazardous duty when and while in combat, but certainly not at any other time.

You have taken the words right out of our mouths in your other editorial in the same issue—"Semper Fidelis et Tutus." Here at Little Creek we have a large complement of Marines whose job is to train others in amphibious warfare. (I suppose the idea to begin with of having Army officers here was for them to present the Army viewpoint on different matters. Actually we teach the Navy doctrine used in amphibious operations. I, for example, teach operational intelligence to Navy officers.) I mention this editorial, however, to tell you that the Navy concurs very much with your comments on the Marines.

The Marines, however, know their stuff, particularly where the amphibious warfare is concerned. But they don't want anybody to contradict them and their views. But what amazes me is their *esprit de corps* and their discipline, and why we in the Army cannot accomplish just as much. I have a feeling we could do better if we really tried. I doubt very much that size has anything whatever to do with it.

From my association with them I have yet to see a sloppy marine, a marine who doesn't salute, and smartly. Or one whose uniform doesn't fit almost perfectly—or one who needs a haircut. They are a disciplined lot, because during their recruit

training and after, discipline is driven into them and always practiced. Past operations like Iwo Jima are frequently reviewed, usually through the medium of training films. Looking at these films, even though there is a bit of propaganda in them, you get the feeling that the marine knows he has been especially selected for something big in the future, and that he automatically reacts to it and starts preparing himself for that day.

As I look back into the past fourteen years of my Army life, both as enlisted man and officer with ten years of commissioned service, I feel we could have built an *esprit de corps* unmatched by the Marines or anybody else. We have so much to point out to our soldiers, to the recruits who have just come in. But we don't ever do it.

Our own public information service could help a great deal in building this *esprit de corps* in every individual soldier. This is perhaps the most important element the Marine Corps uses to build its own. It is definitely a type of propaganda—and it works.

Why aren't our own PIOs more interested in the individual soldier, his background, what he is doing in camp, and so on? Almost daily we read stories about the post commander, his whereabouts, his speeches—but very little about individual soldiers.

On this, I have compiled some statistics. I've used one recent week to tabulate the number of times men of the different services have been mentioned. I've used three local newspapers to get this information.

Army. One photo, of a major general; 11 stories or mentions on 2 traffic violations, 1 medal winner, 6 Korea casualties and missing in action, 1 transfer, 1 visit.

Navy. Two photos showing changes of command; 9 stories or mentions on 4 traffic violations, 2 drunkenness cases, 1 appointment, 2 changes of command.

Air Force. One story of an air crash with pilot safe.

Marine Corps. Five pictures: 3 showing a brigadier general pinning insignia on newly promoted officers, and 2 about enlisted men promoted to officer rank; also 17 stories or mentions on 7 promotions in all ranks, 2 appointments, 2 congratulations, 3 medal winners, 1 missing in Korea, and 2 men returned from Korea.

This certainly proves one thing. The Marines use their PIOs to better advantage. And it proves one other thing, particularly in this locality. Whenever the Army is mentioned it invariably pertains to a man who is a casualty in Korea or missing there in action. The Navy seems to be mentioned chiefly with reference to traffic violations or sailors caught in off-limits areas. The Air Force on aircraft accidents.

While the Marines have stories on promotions, congratulations, medal-winning,

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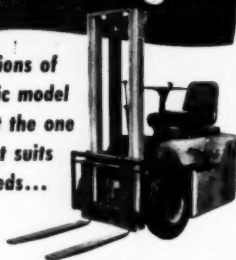
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getting appointed from enlisted to commissioned status, and many other newsworthy, sensible and favorable items. Pictures of marines, whenever they deal with promotions always show a high-ranking officer pinning on the new insignia.

Nearly every bit of the Marine stuff is good, well handled public relations. A marine feels he is being appreciated and wanted—when generals come around that often congratulating him and patting him on the back.

But along with all this, the marine gets plenty of rough treatment; he is definitely not handled with silk gloves. Officers treat him like what he is—a man. The 104th in my 201 is a grim reminder to me that in the Army the rough treatment is out. My battalion commander (for over eighteen years a first sergeant) said to me once that he felt the Army was going to the dogs when you can't "chew a man out" any more. The officer who gave me the 104th said, "This is not 1988; this is 1948. We treat our men different." Maybe so. It is often held today that we treat our soldiers too soft, and soft handling produces soft men. Perhaps it's true that under the baptism of fire the soldier quickly catches on. But is that time soon enough?

MAJOR FRANK NOVAK
Infantry

Naval Amph Trng Unit
Little Creek, Virginia

• Whether or not anybody collects a prize for proving that the combat soldier should get no combat pay, the above letter would deserve a special prize, if we had one, for intelligent comment on two extremely important matters.

Combat Pay

To the Editors:

To begin, let me say I am firmly in favor of a hazardous duty pay for the Infantry and for all combat personnel.

In any scheme of combat or hazardous duty pay, there will be inequities. It is therefore necessary that some firm line be drawn defining "combat." If definition is made by unit, surely the regiment would be the largest unit for which group recognition of combat service should be made. Any larger unit would include too many nonfighting people. If definition is to be by individual, as I believe it should be, that will entail a lot of paper work. Or a monthly roster could be kept, and a simple rubber-stamp entry made in the pay and other appropriate records. But how would we decide who is eligible?

The question of eligibility should be simplified. Make it something like this. Any person who has in the performance of his (or even her) duty been exposed to enemy fire for any period in excess of, say, six hours, in a month should be eligible. The question of exposure to enemy fire is going to be a touchy one. ComZ will no doubt claim that everybody in dock or railway units is exposed to air-

craft attack. Convoy vessels will no doubt say they are exposed to submarine attack. But, as I said, there will always be inequities.

But make the eligibility group pretty small. If practically every person in the theater or combat zone is eligible, the whole purpose of combat pay will be negated. And then the question will come right up again—to give the combat troops a special and appropriate financial recognition.

As to amount of pay, why not keep the same rates now considered adequate for hazardous duty pay?

In the August 1951 "You and Your Army" certain casualty lists are compared. One comparison that ought to be made but isn't is the ratio of KIA to WIA in the different services.

But let's not get to fighting the way the Postal service and the rest of Civil Service have about leave. As I recall, the solution in that case was to cut practically everybody instead of increasing anybody.

On the whole, the policy and content of the JOURNAL suits me fine. Especially Colonel S. L. A. Marshall.

WOJG JACK L. BOLING
U. S. Air Force
(Ex-Cavalry, Ex-FA)

1099 Cass Street
Monterey, Calif.

Amphibious Doctrine

To the Editors:

Let's not be too hasty in "freely granting" credit for accomplishment not earned. Accepting the claims of the Marines for "greater contributions" to the art of amphibious warfare is getting us into the same mess as tactical air. When we acknowledge such claims, we are scuttling our own developments in favor of something less.

"Amphibious warfare" means very little by itself. It's a combination of methods which includes small-boat operations, harbor control, stevedoring, special stowage and waterproofing techniques, navigation and the study of coastal tides, underwater demolition, special use of amphibious trucks and barges, terrain evaluation, military tactics and logistics, communications, engineer construction, ship-to-shore tramways, terminal and transfer point operations, underwater salvage, port development, air and naval cover of land forces, and many other things, to name a few as they come to mind. Taken separately, you will notice among them operations developed by commercial firms, Army engineers and Army transportation, and by the Infantry and other combat arms, the Navy's Bureau of Yards and Docks, the Coast and Geodetic Survey, and still others. I can think of practically none which the Marine Corps can accurately claim to have pioneered and developed. What's more, the Marines have never learned to use them all in successful combination for such a participation.

COMBAT FORCES JOURNAL

IN ANY LANGUAGE....

DEFENDER OF PEACE

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OCTOBER, 1951

Actually, the Marine and Army concepts of amphibious warfare are two different things. Marine methods were designed to establish a naval base on a limited hostile shore. But Army methods were developed to launch and support a major land campaign by sea. Army amphibious landings in Europe and in those of the largest landings in the Pacific were on a scale and involved techniques never approached by the Marines. It is not enough to say that the operations differed in size alone. The concepts, the missions, the methods and much of the equipment were different.

In spite of all this, in the interest of unification the Army is adopting Marine procedure—lock, stock and ballyhoo. Those responsible for Army manuals, lacking knowledge of the facts but well aware of the Marines' sensitivity, seem to be copying Marine procedure verbatim into the new 60-series of field manuals. Forgotten entirely are the lessons of TORCH and OVERLORD. Forgotten are the mulberries, the floating piers, the transfer points, the shuttle waves of assault craft, the land formations assumed at sea, the floating dumps, the gradual change-over from assault to logistical support to port. And the beachheads become sand bars as they were in the beginning.

What are the points of direct conflict between the two concepts? Marine organization is packaged to fit Navy transport

capacity. Its combat troops are specially trained in loading, unloading and the other service aspects of its mission. Its landing craft are planned on a one-trip basis, to carry the complete landing force in the assault. Its logistical support is left to others.

Army organization is predicated on the battle on land, and only temporarily adjusted for transportation by sea. It has service troops trained in stevedoring, beach operation and control, thus allowing the combat troops to concentrate entirely on their fighting. The mass landing by the Army requires economy in the use of craft. They must be shuttled wave after wave, they must assume formations consistent with the dispositions of the troops being landed. The Army's logistical support begins with the assault and builds up to a massive task that requires facilities and services corresponding to major commercial ports.

This is what will happen if the Army adopts the properly limited procedures of the Marines. Units will be organized in a provisional manner inconsistent with their missions ashore and control will become unnecessarily cumbersome. Combat troops will be specially trained in, and responsible for, their own services of loading, unloading, and immediate support while, supposedly, service troops will be unemployed. There will never be enough assault craft for the assault and so there will be too many doing nothing. Logistical support and all it entails will not be provided for. Assaults like those conducted in North Africa, Sicily, Italy, Southern France and Normandy will be impossible (if the books are followed).

I admit this is all theoretical, based on the supposition that the Army will actually operate in accordance with its new Marine Corps manuals. What will the Army do when the time comes to throw the manuals away and improvise—and relearn all the old, hard-earned lessons that cost so many Army lives in the past?

In matters amphibious as in tactical air, the Army cannot neglect part of its own mission by leaving it to others. Unification notwithstanding, self-interest dictates that the services be able to survive and conquer in their own sphere. Let the credit and the glory fall where they may. But let's not hand it out, to our own regret, where it's not deserved.

CAPTAIN AVERY E. KOLB
Infantry, USAR

2952 S. Columbus St.
Arlington, Virginia

• A year or more ago, the Commandant of the Marine Corps, General Cates, agreed with your editors that, with heavy fighting going on in Korea and every Service pitching in to make a go of it there and show that unification is more than a nice long word, it was time for the Army and Marine Corps to quit hammering away at each other with jealous-sounding criticism.

Since then we have had fully trustworthy reports that General Oliver P. Smith's 1st Marine Division is the full equal of any Army Division in the whole glorious Eighth Army. (And if the Marines want to claim its *best* division, we'll simply fall back on the old prerogative of any division belonging to such an army. They're all the best.)

So we publish the above thoughtful comment without any wish to lower the Marines' stock. And as we've said before, the high market quotation on the Marines is entirely possible for the Army to rival if it will just learn to get up on its hind legs and holler how good it is—as the Marines do, or even more proudly. We have plenty more to holler about, including the greatest of all-time amphibious operations.

As for who brought amphibious operations to a high stage of perfection, we think in all honesty that Army and Marines alike should be willing to acknowledge that they were both a considerable distance behind the Japanese enemy when amphibious warfare became a truly vital type of actual operation.

Brighter Aspects

To the Editors:

I received the August issue of COMBAT FORCES JOURNAL today and read with great interest your editorial, "Semper Fidelis et Tutus." I certainly agree that the reasons for the high morale of the Marine Corps could be the subject for a worthwhile essay, and I hope that someone with the background and experience required may be able to furnish us one.

Your sentence in this editorial, "Superb public relations at critical points in its history, rather than the daily humdrum efforts of Marine Corps public information people who are no more efficient than their opposite numbers in the Army, is also a source of high regard in which the Corps is held," is certainly very much to the point. I wonder if a beginning toward correcting this situation could not be achieved in the JOURNAL itself. For instance, in the article "The Division," by Major Farnsworth, the choice of adjectives describing the experiences of John Sykes is hardly such as to promote recruiting efforts for the Infantry. Mud, cold, snow, hard unyielding earth, obnoxious stench, etc., seem to predominate, and finally we find John Sykes "alone and afraid."

While admitting my brief acquaintance with the Marine Corps and a very intermittent reading of the *Marine Corps Gazette*, I have yet to hear a marine ever admit that a marine is afraid or that he is ever alone as long as another marine is within shouting distance.

Granting that hardships, danger, and vicissitudes are more common to the infantryman than to anyone else, surely there must be some brighter aspects as well. It seems to me that we have been greatly overplaying the hardships of a

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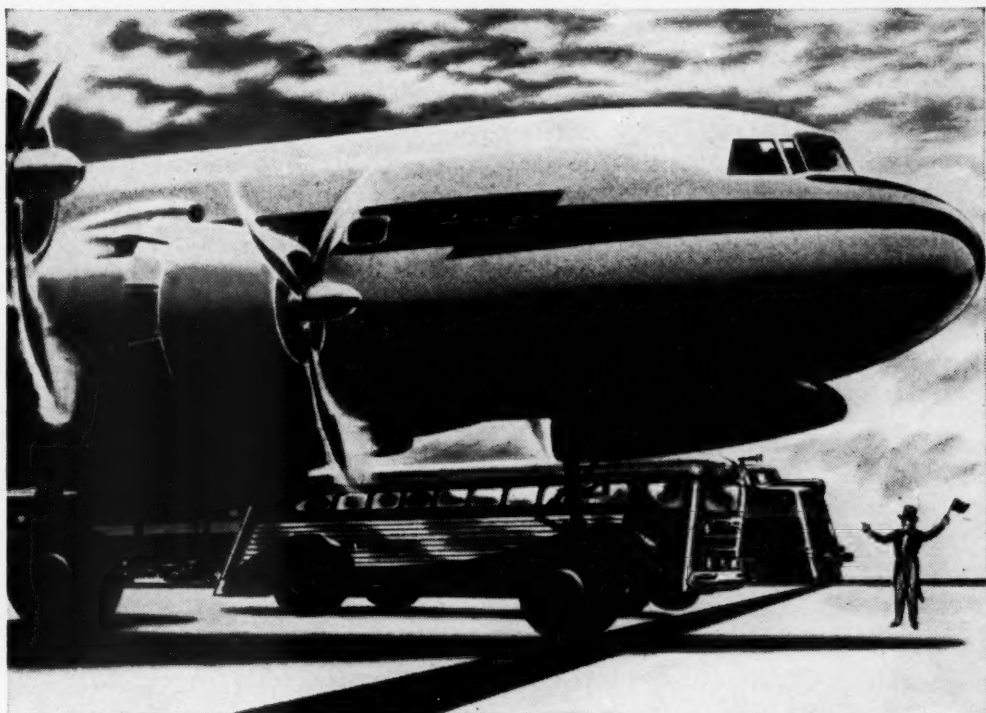
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soldier's life and minimizing the better, if less tangible, factors.

LT. COL. JOHN P. MCWHORTER
Corps of Engineers
Fort McPherson, Georgia

• We're not so sure that every aspect, *bad and good*, shouldn't be emphasized. But above all, we believe that the Army needs to hammer away at the fact that when a man becomes a qualified combat soldier and proves himself in combat, he knows he is a *man*.

Have you ever seen or heard of a soldier with the Combat Infantryman Badge who would trade his standing with any marine?

It would be the same with all other Army combat soldiers who know they deserve a similar distinction.

The letter next below has something to say to the general point.

Better Men for Doing It

To the Editors:

If I may comment on the Army I belong to after no more than several months of experience as an enlisted man, these are the chief things I would put emphasis upon.

We were more annoyed, I think, as members of an Infantry unit during training, by the fact that we were discouraged from identifying ourselves with the

fortunes of our own unit than by any other one thing. The failure here was essentially in the lack of information: we were never told what was going on around us.

To an individual soldier, his unit is an entity that exists in his mind; and he will become devoted to that unit only as it becomes clear to him that his unit really does serve as an active, useful part of the Army. But with us, as I'm afraid it only too often happens, our company never took any more definite shape than that of an orderly room—a place where vague decisions took place and were continually being changed.

We were told to do things, but it was never clear why the orderly room wanted them done. And, naturally enough, we took this to mean that the orderly room didn't know, either. We assumed, because we had no idea of what was happening except that "they" were always changing their minds, that everything was snafu there. But if we had been told what was going on, at least we'd have felt that "they" knew what they were doing. And if this had been handled correctly, we would even have stopped thinking of the company in terms of what "they" had decided must be done, and begun thinking in terms of what "we" had to do.

Certainly the Army does not intend to operate as I have seen it do. The five-paragraph field order was invented for the very purpose of insuring that every element, from Army down to individual, will generally know what the score is. But this is too often neglected in day-to-day practice when there appears to be no need of a field order. Too many officers and first sergeants feel, perhaps out of jealousy for their authority, that it is too much of a concession to the troops to tell them why they are going on such-and-such a problem, or even to tell them in advance that they are going at all so that they will know ahead of time that they will need water and an extra pair of socks. Perhaps the officer feels that the men should not be told why and what they are going to do in order to prepare them for the time they will have to obey any and all orders without question and with dispatch, in combat. But it seemed to me that this was a great error. Because if an officer has nurtured the confidence of his men in himself and his unit, they will, even in emergency, act unquestioningly.

Another way of stimulating morale and fostering that pride in outfit which is probably more important than any other single thing in combat lies on a more formal level. The objectives, or at least the operative tactics, of the Army Information Program might well be partially changed. Certainly a soldier should understand his government. And certainly he should be made to feel that there are pronounced differences between the whole spirit of democracy and the total-

tarian idea. He should be, and usually is, told of his role as a soldier, and that there is a need for soldiers in an imperfect world. He is told, too, about the steps in history that have made our democracy what it is, and that he himself can help make America's future.

These are roughly the lines which the Army Information Program has been taking. These things are all valuable and indispensable and their presentation should be encouraged and strengthened. But we felt in my training unit that the day-to-day side of the soldier's duties was being neglected. He may be told, and he may even believe, that he is in the Army because it is important for him to be there. But no one has bothered to explain to him how KP, how other details, how all the unpleasantnesses of Army life are necessary for the fulfillment of that duty. When it comes down to this day-to-day labor the soldier is simply left uninformed; yet it is this very routine that is most clearly and inescapably present to him all the time.

There is no point, of course, in trying to tell the troops that these tasks are pleasant or that they are the cherished privileges of soldiers everywhere. There is no reason why they should be pleasant. And, I think, they should deliberately be made to seem unpleasant. For this offers a way, I should think, to build pride in a combat soldier. Point out that the Infantry does the things that no one else wants to do, and that Infantrymen are better men for doing it. If someone would start telling Infantrymen this, they would believe it because they would see it true. Infantrymen take a somber pride in feeling that they have it rougher than other troops. And this is a feeling the Army would be well advised to encourage in the group, instead of leaving it up to the individual.

PFC. PETER DAVISON

Red Epulettes

To the Editors:

I would like to make one comment on a photograph printed in your July issue. On page 40 there appears a photograph of a group of Soviet artillery officers engaged in a study of observation methods. The caption underneath the photograph states that this is an undated photograph probably of pre-World War II origin.

But if you will observe the photograph, you will note that the Soviet officers are wearing epulettes on their shoulders. I seem to remember reading somewhere during the last war (possibly in the *Infantry Journal*) that Soviet officers began wearing shoulder insignia only after the beginning of World War II. They wore only collar insignia before the last war; one explanation was that shoulder insignia was too much like the old Imperial Army of the Tsar.

EDWARD B. HOTCHKISS
Fairfield, Alabama

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JUSTICE lags—and time goes on. Time spent in taking or defending some Korean mountain-hill, while the armistice talks go on or stop and Red official lies keep coming.

Justice lags—and months go by. Months of campaign hazard, months of expecting sudden attack by new Red hundreds of thousands. Months of "all quiet" or "practically all quiet" on the Korean front, which seem to many a unit, many a combat soldier facing the foe, only a little less hazardous than all-out battle can be.

The jets fly over high. Great planes. Good men at their controls and at their weapons. In minutes they are at the Yalu. Perhaps they tangle this time with greater numbers of Red-commanded jets. If the Doughboy and those other combat soldiers with him and near him could be up to the north under the same skies, they could watch the high-up dog fight—the miles-wide graceful circling at 500 miles an hour—and even part of the chase—till the specks in the sky were gone, or the twisting and circling were done, with fuel near an end to force a turning back to friendly fields.

Good men in those planes, and no ground soldier there denies it. And

a good feeling there on the ground that good men fly them far beyond the lines. Maybe all return, and according to the press releases and the casualty figures all or nearly all do come back—to safe, protected fields and warm beds to rest in till the turn comes for another sortie and split-second circling high-up time of seeking combat.

Those who don't come back? Some part of those 687 airmen on the latest casualty list? Some die the sudden flyer's death above the clouds. Some take the long twirling fall, too badly wounded to escape the plane. Some reach the ground by chute, and thus the doubtless fate of prisoner in the hands of an uncivilized, ruthless enemy.

The same fate that many, many

thousands of their comrades captured on the ground have met as each man could.

The ground soldier sees them, or maybe only hears them, passing over. The sound is good, whatever thoughts of envy or unfairness brush across his mind. The guys themselves up there are not unfair. In some ways, many ways, the ground is better. No five-mile falls through nothing. Just shells and bombs and bullets, or waiting for them to come. Only a five-foot fall—or dive—to solid earth—no farther, even if for ten thousand soldiers it was the last, short move alive through space. And for fifty thousand others the beginning of days and nights of patching and healing, or maybe never healing.

The figures don't change much. Here they are as of the end of August:

Army	65,355
Marine Corps	13,079
Navy	939
Air Force	687

There are men in Congress out of battle themselves—trying daily to wedge the bill into the vital grist of appropriations and keep it bright in the minds of other legislators not so clear of mind about what the combat soldier deserves.

A slow business. Intolerably slow, we say—as we refuse to give up hope



that the greatest, most continual hazards of battle cannot possibly go unrecognized and unrewarded in the end.

Tribute to Artillery

THE American artilleryman reflects better than any other soldier the peculiar ability of the 20th Century American to make machines work for him. As a technician of the highest order he is endowed with sensible, plain and practical ability that makes him the most ruthless killer armies have ever known.

A job well done means more to him than glamor or headlines. He is not one man but a team, serving a gun that increases the fighting power of each member many, many times.

It isn't often that he gets a tribute, even from his fellow fighters, so these words from General Matthew Ridgway ought to be made imperishable:

"In none of our previous combat experience has the value of artillery been greater, both in inflicting losses on hostile forces and minimizing those of our own infantry."

Artillery Conference

LAST month, our artillery editor shed his shackles and flew out to Fort Sill to attend the artillery instructors' conference then in session. On his return he reported that he had a good time, saw many old friends, made some new ones, but most important of all, learned a lot.

Most of what he saw and learned about weapons, equipment and techniques is classified. But he now has the background to do a better job as an artillery editor. Moreover, it has brought the staff, through him, in closer touch with the latest developments in artillery.

He was greatly impressed, he tells us, with the intentness of purpose the artillerymen went about their work. In all of his departmental visits, his social contacts, and the conference itself, he detected a real, deep-seated thirst for knowledge, advancement and improvement in artillery weapons and procedures. According to his report, the officers at Sill are eating, drinking and sleeping artillery and he was amazed at how much free discussion was apparent at all levels.



The Caissons Go Rolling Along

*Over hill, over dale, we have hit the dusty trail
And those caissons go rolling along
"Counter march, Right about," Hear those wagon soldiers shout
While those caissons go rolling along.*

Chorus

*For it's "Hi! Hi! Hee!" in the Field Artillery
Call off your numbers loud and strong
(Call off!)
And where-e'er we go, you will always know
That those caissons are rolling along,
(Keep 'em rolling!)
That those caissons are rolling along.*

*To the front, day and night, where the dough-boys dig and fight
And those caissons go rolling along
Our barrage will be there, fired on the rocket's flare
While those caissons go rolling along.*

*With the cav'ry, boot to boot, we will join in the pursuit
And those caissons go rolling along
Action front, at a trot, volley fire with shell and shot
While those caissons go rolling along.*

*Should the foe penetrate, ev'ry gunner lies in wait
And those caissons go rolling along
Fire at will, lay 'em low, never stop for any foe
While those caissons go rolling along.*

*But if fate me should call, and in action I should fall
Keep those caissons a-rolling along
Then in peace I'll abide when I take my final ride
On a caisson that's rolling along.*

(After Last Chorus)

Bat'try, Hal-t!

EDMUND L. GRUBER



He found that the opportunity to discuss this magazine with officers a most worthwhile part of his trip. He came away with the distinct impression that the artillerymen with whom he talked were enthusiastic about their professional military journal and offered some worthwhile suggestions for its improvement. If there were critics, good manners and Sill hospitality silenced them. We find that criticism stimulates us as much as praise and we don't mind hearing it. The next time we send him to Sill he will be under direct orders to bring back a beef.

Honor

MISTAKEN notions have followed the trouble at West Point. hindsight tells us that maybe the very first release about the cheating could well

have been accompanied by a most detailed description of the honor system and its very rigid limitations to those times when a Cadet gives his word. The idea still seems rife that the West Pointer runs to the authorities with every minor violation of Academy regulations, which is nonsense. We have had great difficulty in explaining to many persons who have viewed the whole business with the distress all Americans should have felt about it, that a Cadet is under no obligation whatever to report major breaches of regulations for which the violator would be pitched out of the Academy if found guilty, so long as nothing of "honor," no word pledged, was involved.

Members of your Association staff have known General Fred Irving for nearly twenty years. Of all the superintendents West Point has had none have been more able, more un-

derstanding, more fitted to the task—in sense of responsibility, in forward outlook, in wish to preserve tradition and at the same time make certain that the institution keeps up with today's needs of today's fighting Army and Air Force. A proven battle leader, and one of the finest and most realistic combat instructors Benning has ever seen, Fred Irving deserves the full encouragement and sympathy of our own Association in West Point's time of trouble—to a trouble which—another thing few people realize—had its origins long before General Fred Irving took command.

Fred Irving's recent letter to General Chauncey Fenton, Secretary of the USMA Association of Graduates, which had full distribution to the press as well as the graduates, makes clear certain things which every reflective graduate has suspected from the first announcement. The groups of cheaters comprised an organized and highly secret group, passing information on exams by secret message—a systematized, gradually, and most secretly developed group engaged in completely unwarranted special privilege. Any honorable college, on discovering their existence, would have dismissed them on the spot. The heart-searchings and groanings of sympathy and the guard-house lawyering that still goes on seems to us a matter of some ulterior purpose, not related to any desire to preserve the effective honor system of the U. S. Military Academy.

In our view it has been effective, not just for four years but for forty—to the end of an officer's career. And for every graduate of the Academy for whom it has meant a personal ideal of operation through life, it has equally been adopted and lived up to by a number of others who have gained their commissions, regular or temporary, from other equally honorable sources.

We are not suggesting that West Point's honor system should go year after year and decade after decade without close examination. External circumstances and regulations change with the years, even if the ideals of official and personal honesty do not. Not a year passes, we feel certain, but what the Honor Committee, with some advice at times from the West Point staff, must consider new phases, new questions of application of the system. Such a system is not exactly tables of commandments carved on

stone. It is a human product, guarded and cherished by men who know what it means and has meant for a century. It must be re-examined often, as we have no doubt it has been.

Once, we have heard, there was an able superintendent of the Academy who thought the honor system should be made more comprehensive. When a cadet signed in from leave his signature should mean that he had been an ideal cadet while away from the Academy—that he hadn't taken a drink, for example, and had stayed away from the wrong kind of women. What was the result of these suggestions by the general in command? A respectful statement, so we have heard, that the honor system would be dropped entirely—that the Honor Committee considered the superintendent's ideas completely objectionable—certain to disrupt and weaken the whole traditional idea of honor at West Point.

We regret with every man in the service that this trouble ever developed. We think no other action could have been taken in the circumstances than the action the authorities took. And unhappy as it all has been, we feel certain that lessons have been learned from it. Too much emphasis on football—too many special privileges for the team? It seems to us likely. In our opinion an athletic team counted for nothing when honor was involved. And as the country knows, it didn't.

Guarding the Reserve?

BY now we are resigned to discussing the sad state of the Army Reserve with visiting members. Where so many Reserve officers have little good, and much bad, to say about their military affiliation, we cannot help but conclude that something is lacking in the Reserve program.

One of our recent visitors was a Reserve colonel, with 21 years of service as an officer. This certainly makes him experienced, but we are not sure that all those years don't make him an old poot. Poot or squirt, whichever, he broke loose with an idea that is bold, fresh, and perhaps even workable. As he put it, "Hell, it couldn't bitch things up any worse than they are now."

Let's let the Colonel tell it.

"The prewar Reserves took a lot of kidding, but you had a loyal bunch

of Reserve officers with at least a smattering of knowledge—and when 1941 came around they were a [censored] valuable adjunct to an impoverished army. They howled when they were called as individuals instead of as units, but they dug in and produced. There were sad sacks in the outfit—but some Regulars were relieved too.

"The trouble with the Reserve today is that it is competing with the National Guard instead of working with it. If a guy wants to recruit troops and drill every week, he belongs in the Guard. If his speed is twenty drills a year, then let him be useful in the Reserve. But don't try to compete with the Guard by means of so-called Class A and Class B units.

"Instead of competing with fully organized units, let the Guard have the enlisted men. Let each Guard unit—company, battalion, regiment, or whatever—have as satellites one, two or three Reserve units, officers only. The Guard could supply the materiel and the enlisted men. The Reserve could take over a certain amount of the instruction—with officers three deep, and a portion of these officers taking drills only every second or third week, there could be some real instruction, and some real cooperation. Instead of paper outfits, the Reserve could work with men and materiel. The Guard could have a lot of help.

"It could be distinctly understood that regardless of relative rank, the Guard commander was top dog, since it was his armory and his men and his equipment. There was no trouble with this problem with the RA, so there shouldn't be with the Guard.

"OK, I've given you the tip, now you guys take the ball from there. I'd give my left arm to have some of my officers see the inside of an armory, and get an opportunity to get away from lectures on the organization of G-4."

Maybe he has something. Let's hear from you people in the audience.

Mobility Unlimited

IN Korea, helicopters and light, fixed-wing planes have performed many tasks usually given to jeeps and bigger trucks (or to men and animals, in country where trucks can't operate.) And larger cargo-carrying aircraft have air-dropped food, ammuni-

tion, medical supplies, even 4,500-pound steel bridge sections and 105-mm howitzers.

All this sounds impressive and it does show we are getting to be a more air-transportable army. But where do we stand right now? How far have we come since 1946 when the Secretary of War said the Army's objective was to reach the capability of being readily air-lifted? In 1950 the Army Airborne Panel reiterated this objective, but noted that the immediate goal should be to make "all divisions, except armored, capable of executing airborne operations."

For about a year now the focal point of this important business has been the Army Airborne Center at Fort Bragg, recently transformed into a unified Joint Airborne Troop Board. Understandably, a lot of the work there is classified. But Major General William M. Miley, Director of the Joint Airborne Troop Board, also sees his job as partly educational—telling what air transportability means and what has yet to be done to make the Army truly air transportable. That's a job of convincing the unconvinced, and stirring up enthusiasm among those who are still inclined to think airborne people are a bit hipped on their specialty. Actually it's not a narrow specialty but one that applies to the whole Army. And in his educational work General Miley has lectured at many service schools, and what is said here about airborne operations and air transportability is largely drawn from what General Miley has said at the schools.

The first characteristic of airborne operations is mobility and yet General Miley questions whether airborne forces have greater mobility than others. True mobility, he says, means the capability of moving forces from one place to another fast. "Certainly airborne forces can move rapidly, but they can do so only on a one-shot basis," he says. And "once they land they have no more mobility than any other ground forces."

That is an important qualification. Until the initial advantage achieved by air movement can be exploited by giving the airborne troops "a high degree of mobility once they land in the objective area," we are not truly mobile. To gain that degree of mobility General Miley thinks we have to have three things—"a better means of air transportation, lighter equipment of all sorts [and] air lines of communi-

cation, both to the troops engaged and to the Army as a whole."

We will get true mobility to the extent that we make progress in these three ways. Progress in any one direction will give us more mobility. But it will take substantial progress in all of them to give us real mobility. That is the way General Miley looks at it.

Better Air Transportation

THE glider has been declared obsolete. Although no one mourned its passing, the result is that right now the only means of transportation available to airborne troops is the parachute for both men and equipment. The parachute is admittedly an inefficient means of transportation. So, the trend is to eliminate the parachute. The assault transport is a step forward. Tests indicate that it can be landed under much the same conditions as gliders. In fact, it was built to be a glider, and with only minor changes was made into an airplane. The C-123, which will carry a 16,000-pound load, is the assault transport which rendered the best performance of all those tested at Eglin Field. At the request of the Army, the Air Force has ordered a number of these planes. Early delivery will make the Army much more mobile.

Continued development in the field of heavy-lift helicopters will provide better air transportation. Heavy-lift helicopters are not available now, and

can conceivably be delivered right to their battle positions and, if necessary, moved to new positions.

However, there is another aircraft which promises to provide even more revolutionary results—the convertiplane. This aircraft gives the greatest promise of providing a truly efficient troop carrier vehicle. A convertiplane is not a specific type of aircraft, but is a name which is applied to an aircraft which combines the landing and take-off characteristics of a helicopter with the forward flight characteristics and efficiency of a fixed-wing aircraft. This type of aircraft should not only be able to land troops and their equipment with the efficiency of the helicopter, but should also be capable of flying fast for long distances. What is needed before any appreciable increase in the capabilities of airborne operations can be achieved is an aircraft which can land and take off from unimproved fields. Until they can, we must continue to land men and equipment by parachute. And, air landing is cheaper. Air landing decreases the number of aircraft required, which also makes for greater flexibility and mobility through increased efficiency. Finally, it will enable all troops to engage in an airborne operation, and not just the specially-trained troops of an airborne division.

Lighter Equipment

The design and production in quantities of the right kind of aircraft is only part of the problem. Much can be done by the Army itself by reducing the weight and size of its equipment. It is here that the work of the Joint Airborne Troop Board becomes widely significant. General Miley holds that true mobility must pervade every branch and echelon of the Army. Then lighter vehicles, weapons, and equipment of all sorts will become possible.

"Everything the Army needs to fight with must be as light and compact as possible, without, of course, affecting its other required capabilities," he has said. "Any substantial reduction in the size and weight of this material and equipment can be attained only through the use of unconventional design and light metals."

Unfortunately, General Miley has noted, such ideas "immediately generate stiff opposition." He has been told that light metals production would be monopolized by the Air Force in time of war and that the unit cost of Army



won't be for possibly two or three years. Meanwhile, however, the present light helicopter has been used successfully on a limited scale in Korea. When a heavy-lift helicopter is available, troops and their equipment

equipment built with light metals and unconventional design would be prohibitive. One reply to the Air Force argument is that if the Army's equipment became lighter, its requirements for cargo aircraft would become smaller. Another is that Army priorities might (or should) be as high as the Air Force's, and large increases in the production of light metals might be possible and necessary.

As to the cost of redesigning Army equipment, General Miley holds that this is a shortsighted view: "It is certainly true that in peacetime, when the Army's requirements are small, the unit cost of much equipment would be high. However, in time of war, when the requirements for equipment would be enormous, the unit cost would unquestionably be reduced and might possibly become less than conventional items because of the lesser amounts of materials involved."

General Miley sees a great inconsistency in the announced policy of the Army to become more mobile and air transportable and the tendency to increase the weight of weapons and equipment. Two prime examples of this are the new jeep and the new 2½-ton truck. The jeep weighs three or four hundred pounds more than it used to and the two-and-one-half-ton truck weighs a whole ton more. General Miley has observed that it is inconceivable to him that it takes a seven-ton vehicle (that's what the 2½-ton truck now weighs) to carry two and one-half tons when "by the use of unconventional design and light metals a vehicle weighing two and one-half tons can be built that will carry two and one-half tons."

The increase in weight in the jeep is just as distressing to those who want lighter equipment and greater mobility. The refinements in the jeep that make it a heavier vehicle do not increase its capacity a single ounce. The increased weight is principally in the heavier battery system and the water-proofing. General Miley can get a bit sarcastic on the latter improvement: "The jeep can now swim, but we can't afford such refinements as a swimming jeep. We are much better off moving this jeep across water with a helicopter when the occasion requires rather than adding permanent weight on a chance we may one day want to cross water. Anyway, have you ever seen a nice, sandy, gravely bottom at the place you want



Out of this jungle burden carrier may come a cross-country vehicle that can carry the airborne infantryman's loads right into the frontlines.

to cross? It's bound to be muddy, and that is where the jeep will stall. I am against the swimming jeep."

General Miley might have observed that the jeep was originally designed as a weapons carrier for the infantry and that after it became an all-purpose vehicle of soldiers, sailors and airmen, the needs of the Doughboys and Marines for whom it was designed were largely forgotten. So now the Doughboys and Marines are looking around for something lighter and equivalently powerful. General Miley and his staff are interested in this.

"One of the most pressing needs is for a vehicle to get the weight off the back of the infantry soldier," he observed not long ago. He told of a study his staff made to determine the weights carried by individuals of an airborne outfit. It revealed that the weight load of men carrying individual equipment, weapons and ammunition varied from fifty to ninety-eight pounds.

"There is, of course, an obvious way to take the weight off of a man's back," General Miley says. "Just give him less equipment. That has been advocated. Some equipment can and should be taken away from the soldier. However, we must insure that

our soldiers are the best equipped in the world. The modern soldier needs modern weapons and equipment to fight his battles. The answer is not to take away his equipment, but rather to give him a means of carrying it. I think it is high time we invented some kind of a mechanical mule."

For sometime now the JATB has been experimenting with a mechanical mule—a seven-year-old one, developed during the war by the Willys-Jeep people, and called a jungle burden carrier. It is a small-wheeled cart with a simple flatbed deck powered by a small but rugged engine. It will carry about 800 pounds but the Joint Airborne Troop Board envisions a vehicle that will carry a thousand pounds.

In preliminary tests the jungle burden carrier—it needs a new name—has proved itself equal if not superior to the jeep in sand and mud and in climbing grades when carrying such normal infantry loads as a machine gun and ammunition, 81mm mortar and ammunition, or 75mm recoilless cannon and ammunition. On dry roads it can travel at thirty miles an hour or more.

(As an aside we would advise Gen-

eral Miley to be cautious in his development of such a light carrier. As one of his staff officers observed not long ago, as soon as such a machine becomes available in quantities some bright machinist will build a plywood body to go with it, add a horn, directional signals, windshield wiper, cigarette lighter and built-in television. Good-bye infantry carrier.)

While the use of light metals in heavy artillery would be a boon (the 105mm howitzer has had its weight substantially reduced in certain experimental models), the greatest savings in weight from the use of such metals would not be in the weapons themselves but in the decrease of the weight and size of the tractors and trucks used to haul the heavier guns. Lighter weapons will make lighter prime movers possible. While there are some fifty-four 105mm and eighteen 155mm howitzers in the present infantry division, there are more than 1,000 jeeps, 370 $\frac{3}{4}$ -ton trucks and 700 $2\frac{1}{2}$ -ton trucks. The use of light metals would appreciably decrease the tonnage of such vehicles.

In other fields progress is being reported. The Signal Corps has reduced the weight and size of its new switchboard about seventy per cent. It has developed a new type of field wire that weighs forty-eight pounds per mile as compared to 132 pounds per mile for the wire used in World War II. Its new walkie-talkie radio is just half the size and weight of the older version and yet has four times as many frequency channels and double the power.

A tractor has been developed by the Corps of Engineers that weighs half as much as the standard version of the same power. Lightweight attachments make it successively a bulldozer, front-loading shovel, grader, prime mover, and power source for a winch.

Lines of Communication

The mobility of armies has always been limited by the need for protecting their lines of communications. To say it another way, as General Miley has, is to say that "our combat army is only as mobile as its logistical support." General Miley's solution for this is air lines of communication. "Not only feasible but less expensive and far more efficient," he says.

He thinks that air transportation "should provide the normal lines of communication to combat troops, with ground lines used only in an emer-

gency." He doesn't mean all the way back to the zone of interior but lines of communication within a theater.

Such a system would put our commanders in an enviable position, General Miley observes. "They would not need to protect their lines of communication and if a commander had the added capability of air landing or air dropping part of his army behind enemy lines and keeping it supplied by air, too, he certainly would have a tremendous advantage."

General Miley likes to quote from Korean reports to substantiate his air lines of communication thoughts.

During the retreat following the surprise entry of the Chinese Communist into the conflict, unit after unit lost its supplies and had to be re-supplied from the air. This, General Miley says, quoting from the report of an observer, taught the combat soldier that "he did not have to fear outrunning his supply." Tactical commanders and their men learned to depend upon air supply. What does this mean? In the words of the Korean observer, it meant this:

"The tactical commanders were willing to push assaults to secure advantages in tactical situations, which, without air supply, they would have hesitated to do. Battalion and regimental commanders pointed out that in the recent northward advances they had not hesitated to cross rivers, to energetically pursue the enemy, even though they knew they would be cut off from ground transportation until such times as the engineers could construct bridges. These combat soldiers are using air supply as a direct means of furthering aggressive combat tactics."

The former Airborne Center and its successor, the Joint Airborne Troop Board, is doing a lot of hard work in this field. They envisage a theater in which all depots, repair facilities and service troops would remain near the port, properly dispersed, of course. From there all supplies would be flown to the combat forces. Instead of the area between the port and the front lines being a maze of depots, dumps and service units of one kind and another, the area would be a sort of vacuum of minor interest to the Army.

How many airplanes will it take? Not as many as you might think. Assuming that it takes 7,780 tons to re-supply a type field army of twelve divisions for one day, and that 2,000

of these tons can be saved by leaving all service units at the port, it would be necessary to fly in 5,780 tons each day. General Miley's staff officers have estimated this would require no more C-123s than are now required to lift an airborne division. They could fly up to 500 miles—the radius of that type of plane. After the army had gone beyond 500 miles, the base would necessarily have to move forward.

As to the vulnerability of air lines of communication, General Miley says: "Some of your planes will be destroyed. You can't fight without that happening. So will some of your trains or trucks. We have rarely fought when we did not have air superiority. Your bridges can't dodge enemy bombs and neither can your trucks and trains, whereas air lines of communication capitalize on the speed and flexibility of aircraft, aircraft which do not necessarily move on a predetermined route such as trains and truck convoys must follow. No more air superiority should be needed than is needed for ground lines of communication. Air protection is needed for both air and ground lines of communication, but it appears that less protection would be needed for air lines of communication. The port area will be spread over a wider area, and that will make it less vulnerable to bombing."

General Miley sees further advantages in air lines of communication through the elimination of transit bottlenecks, such as marshalling yards, truck terminals, bridges and tunnels.

General Miley is happy that General J. Lawton Collins, the Army Chief of Staff, hardly ever makes a speech without referring to air transportability. "We are in an air age," General Miley has said, "and when General Collins speaks about mobility he means air mobility. Airborne operations provide the quickest means of enveloping the enemy and the most rapid means of massing our troops at a decisive point. The potential for airborne operations appears to be unlimited. By the development of better air transportation, and air lines of communication, and lighter equipment we should expand our capabilities for airborne operations and the logistical support of our entire Army."

"Progress in any of these will give us added mobility. When and if all of these goals are achieved, optimum mobility will have been obtained."



THE ARMY NEEDS NAMES

Master Sergeant Julian Hiley

The Army needs easily remembered names for its things and its methods, replacing such hard-to-remember terms as VHF-401-A, M4A1, and Means of Communication

THE Army is in urgent need of names. The civilian who lives in a world of things, most of which have descriptive, easily remembered names, finds himself in a world of nameless things when he comes into the Army. Instead of names, he is confronted and confounded with a series of words with sub- and sub-sub-headings, or numbers that classify the item.

Truck, ¼-ton, 4 x 4, is made up of both categorizing words and numbers. It cannot be trimmed down and called a truck because there are many other kinds of trucks in the Army. And, in the ordinary sense of the word, it is not a truck. A truck, to most persons, is a vehicle designed to carry cargo. The quarter-ton has almost no cargo space; it is designed to carry men.

Though descriptive, ¼-ton and 4 x 4 are numbers and hard to remember.

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If you do not believe numbers are hard to remember, watch a driver who is asked his auto license number. Most of them have to look it up. Lots of soldiers have to look in their wallets to find the telephone number of their best girl friend.

One of my unpleasant duties during World War II was to teach aircraft and armored vehicle recognition. After struggling through a few classes, I noticed that the men learned to recognize the British and Japanese planes much quicker and more accurately than U.S. and German planes. At first I thought the British and Jap planes might have more distinctive features. Close comparison, however, did not turn up any such distinguishing features. But why were one nation's planes more difficult to recognize than another's?

"Stupid Ben," a lanky farm boy, so nicknamed because of his naive and sometimes ridiculous remarks, solved the mystery. One day while we were showing slides of different planes Stupid Ben said: "Sir, them airiplanes with the names ain't so hard to larn,

but I never could larn figgers. Them Spitfires and Mosquitoes and Barracudas is got somethin' you kin hang onto. But them B-24s, B-25s, and B-26s get all mixed up in my head."

After a bit of snickering, other members of the class spoke up in agreement. I pointed out that all U.S. planes had names. However, I had to admit that for some reason the names appeared on only a few of our training aids. Most of the men recognized some U.S. planes by name, such as Superfortress, Mustang, and Black Widow. But only a few knew such common planes as Lightning, Warhawk, Havoc, or Invader by name.

Our armored vehicles were even harder to remember than our planes. M3, M4, M5A1, M10, M12, M16, M20, M24 and M26 "got all mixed up." Some of the armored vehicles, too, had names, but they seldom appeared on our training aids.

Had names of U.S. planes and tanks appeared on all of our training aids, our training problem would have been lessened. In classes, in training literature, and in the newspapers these carriers were designated more often by number than by name. This imposed a double learning load because, to be conversant, one had to know U.S. planes and tanks by their numbers and their names. If the names had been in common use, the thing would have been much simpler.

Eugene, the fantastic little animal in E. C. Seegar's comic strip, "Pop-eye," was not overly articulate. But the one sound he gave voice to seems to have been filled with a lot of real magic. As delightful as he was, there are many soldiers who now do not remember Eugene. Nevertheless, they constantly use the one word he added to our Army vocabulary. Eugene's word was, of course: *jeep!*

MY FIRST memory of *jeep* in Army usage goes as far back as 1940. About that time I was with the 121st Engineers, a District of Columbia National Guard unit. We had a newly issued air compressor which I remember was dubbed "the jeep." Whether this name was derived from *GP* (*general purpose*) or from Eugene's bark, I do not know. And whether the name stayed with the compressor as it has with other Army equipment, I do not know.

My next memory of *jeep* was when it became attached to our new command cars in 1941. The word came to

life when I was in a newly activated California National Guard unit, the 144th Field Artillery. *Jeep* stuck with the high-wheeled ungainly vehicles until the quarter-tons were issued. When the smaller vehicles first appeared, we began calling them *peeps*. This seemed to be logical, because *peep* suggested something small. However, as the smaller vehicles became more popular and the unwieldy command cars began to fade away, *jeep* transferred its attachment to the quarter-tons.

Since then, the word has continued to be a bit fickle, but by all odds its most popular connotation is *truck*, ¼-ton, 4 x 4. It has also been the name for a raw recruit, a small reconnaissance and liaison airplane, and (in the Navy) an escort carrier.

Merriam's 1949 edition of *Webster's New Collegiate Dictionary* devotes seventeen lines to *jeep* and throws in an illustration with a four-line caption showing the quarter-ton.

SR 320-5-1 (*Dictionary of United States Army Terms*) meticulously avoids the term.

Perhaps the Army dictionary is right, but how many recruits know what a *truck*, ¼-ton, 4 x 4 is? And what motor sergeant would stick his neck out by telling a driver to move "that quarter-ton truck, four by four"?

The quarter-ton has also been called *bantam* and *blitzbuggy* as well as *jeep* and *peep*. Why all these names for the quarter-ton truck and why the popularity of the word *jeep* for so many different things?

Going back to the first *jeep* I ever knew, let's look at its nomenclature: *Compressor, air, truck-mounted, gasoline-engine-driven, 60-CFM*. Wow! What a mouthful. It's like announcing a multinamed European aristocrat. "Joseph Aristophanes Xavier Thomas Antonio Francisco Xenophon Jones." If he's a good fellow, all the boys down in the corner saloon will call him "Joe." And if a piece of equipment is a good friend, it will get a short name showing that it has the affection of the common soldier. The air compressor, a friend indeed because it did so many jobs that otherwise would have required a lot of GI sweat, was called *jeep*.

I SEE I said *GI sweat*. To have been correct I might have said *soldier sweat* or, more horribly correct, *enlisted man's perspiration*.

And this reminds us that the enlisted man in the Army has never known exactly what to call himself. *Soldier* was fair, but it did not distinguish the enlisted man from the officer—in spite of dictionary definitions. An officer likes to think of himself as a soldier because the word implies a man of courage—a warrior. General MacArthur's quotation of "Old Soldiers Never Die" surely implied that the General considered himself an old soldier—not just an old officer. *Enlisted man* is hopelessly impersonal, long, and hard to say. It is also a slight misnomer in that many men in the Army do not enlist, but are drafted. *EM* because it begins with a consonant is not euphonious and is hard to say.

Doughboy implies an infantryman only. *Dogface* is disparaging.

GI is now the most popular and perhaps the most fitting description of the soldier who is not an officer. An abbreviation of *government issue*, *GI* implies that the man is a product of government processes, which he is. It also implies a general level: a likeness in problems, hardships, social status, training, and fitness—a sort of *E Pluribus Unum*. *GI* does not suggest a reckless and bold adventurer with shining armor, nor does it suggest a down-trodden underling.

GI, like *jeep*, has also been fickle in its attachments. A stickler for rules and regulations is very *GI*. On Friday night, when floors are scrubbed, we have a *GI party*, and everyone has to *GI* his section of the barracks. And, of course, every *GI* has had a case of the *GIs*, an ailment usually associated



with food from soapy pots and pans.

Webster's New Collegiate Dictionary (1949) devotes eleven lines to the word (or letters) *GI*. The word does not appear in SR 320-5-1. And recently it was officially banned.

MANY items of equipment that begin with easily remembered names soon acquire anonymity because of

the Army's lack of recognition of those names. For instance, the old Springfield rifle became the *U.S. Rifle, Caliber .30, M1903*, and the Garand became the *U.S. Rifle, Caliber .30, M1*. For want of a better name, the soldier now calls his rifle an *M1*. But *M1* can mean any one of a legion of items. For one thing, it might be a carbine as well as a rifle. If he calls his *U.S. Rifle, Caliber .30, M1*, simply *rifle*, it might be a 57mm, 75mm, 105mm or a 155mm rifle, as well as a caliber .30 M1, an M1917 or an M1903 rifle. All of which is confusing.

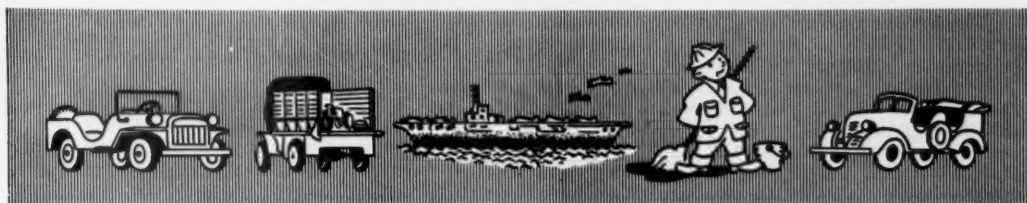
Look at the nameless clothing he wears. He does not wear an *Eisenhower* or *Ike jacket*—easily said and remembered. He wears a *jacket, wool*—which may be confused with his *jacket, field*. Nor does he wear a *MacArthur* or *Mac shirt*. He wears a *cap, garrison*, which would be much more easily remembered if it were called a *trench* or *overseas cap*. And to make it even more confusing, the *cap, service*, of today was at one time in the past called the *cap, garrison*. The soldier's other headpiece in those bygone days was the *hat, service*. The soldier today calls the *cap, service*, a flying saucer—a much more descriptive name.

The Chemical Corps, facing the problem of difficult technical names, has made some progress in the nomenclature of chemical agents. They have gone from high-sounding to sensible names in their general classifications:

OLD TERMINOLOGY	NEW TERMINOLOGY
Vesicants	Blister gases
Lung irritants	Choking gases
Systemic poisons	Blood and nerve poisons
Sternutators	Vomiting gases
Lacrimators	Tear gases

They have also set up a system of symbols for all of their agents such as H, L, CL, and CG. Though letter symbols are harder to remember than simple names, they are much easier than such chemical names as *chloracetophenone*. When chemical agents have had common names, these common names have been used instead of the chemical names. For example, *mustard* is used instead of *beta, beta prime, dichlorodiethylsulphide*. However, no common names have been given to chemicals that do not already possess them, such as *diphenylchlorarsine*.

Perhaps the most confusing of all equipment in the Army is radio



equipment. It would take several full pages to list the things that read like *NR/CXP-1*, *RC-182-A*, *BC344-D*, *R-100/URR*, *VHF-401-A*, and *SCR-300-A*. These letters and numbers may have some meaning to the initiated, but it might be well to give simple names to radio sets that are widely used in the lower echelons.

THERE is a need for names to represent ideas and procedures as well as equipment. In our field manuals, *means of communication* is used over and over. There is no one word that normally expresses the idea contained in this high-sounding and awkward phrase. SR 320-5-1 gives as one of its definitions for *communication(s)*: "means, methods, and routes of sending or preparing messages." With this definition, *means of communication* could be called a *communication*. For example, a *radio net*, a *wire net*, and a *system of signal devices* might be called *communications*. Such usage is a distortion of the word's common meanings.

Distortion of common meanings to fit certain military concepts is a dangerous linguistic practice, in that it introduces a sort of double-talk into our intercourse. It creates a need for some kind of green- and red-light system that tells us whether we are using the English, or the military, language.

The common meanings of *communication* are: (1) the act of communicating; (2) intercourse based upon an interchange of words (spoken, written, cabled, or the like) or meaningful symbols of some sort; and (3) that which is communicated or imparted.

There is a distinct need for a word in our military language that implies a method or means of communicating.

The medical, chemical and physical sciences, and the advertising business, make their own words when they are needed. Why can't the military do the same? Why not coin some word

such as *comway* or *signalway* to stand for a method or means of communicating?

Communications is burdened by another even stranger meaning: "routes and transportation for moving troops and supplies, especially in a theater of operations." This abortive use is so much a part of our military literature that it will probably continue its hold on our military vocabulary. It, and other words of its kind, will also continue to take precision and force from our military writing.

It is unfortunate that when the need for this phrase arose, a simple phrase like *linking zone* was not chosen. If a high-sounding word or phrase was needed, *interjacent*, *interlineal*, or *intermedial zone* would have been better. At least they are not ambiguous.

Another word whose ordinary meaning has been distorted to fit a military concept is *displace*. This word as commonly used has a dual implication: to put out of place, and to replace. For example, a floating body displaces its own weight of water. However, a unit that displaces does not put another unit out of place, nor does it replace another unit. It simply leaves one position and takes another. *Change positions* or simply *move* is much more accurate and meaningful than *displace*.

ALTHOUGH the Army has warehouses full of nameless things and its literature is full of nameless or poorly named ideas, it also has names (or words) that are used over and over that are meaningless. One of the most popular titles or subheadings in military documents is *tactics and techniques*. *Techniques* is as useless as a sixth toe. *Tactics* means "the science and art of disposing and maneuvering troops"—or, simpler, "how to employ troops." *Techniques* means "how to do things." The title's real meaning comes out about like this: *How to employ troops and how to do things*.

Redundance of this kind is most often found in pompously written documents. We hope that such writing is becoming rare in our Army literature. Other redundant phrases that may appear in pompous writing are *principles and doctrines* and *logistical supply*.

THOUGH this article began by asking for names for nameless things, namelessness is probably less confusing than too many names. For this reason a person who writes or lectures should make certain that he uses correct nomenclature. When in doubt it is well to check with SR 320-5-1. For example, it says that *cross hair* means the crossed etched lines on a reticle or actual strands of hair, fiber, wire, or silk used to center a line of sight on a target or other object in telescopes, sights, and other optical instruments. Most Webster dictionaries give about the same meaning.

Some recent writers and lecturers, however, have used the terms *cross wires* and *hair line* to describe these crossed etched lines. Now *cross wire* might be correctly used by a lineman in the Signal Corps, but its use as a synonym for *cross hairs* is confusing and unnecessary. *Hair line* is just as confusing because it already has three common meanings, according to Webster: (1) a very slender line, as in type; (2) in textiles, a narrow color striping, or striped cloth; and (3) outline of the scalp, or the growth of hair on the head.

A GLANCE at your newspaper will show you what the business world thinks of names. The coined names for manufactured products is almost endless. A study of trade names shows that advertisers are using, for many of their new products, short—usually one-syllable, not more than two-syllable—names. Why are names like *Spam*, *Mum*, *Vel*, and *Quink* so popular among our advertisers? They require little space to print or time to

say. They are easy to remember. Like one-syllable Anglo-Saxon nouns and verbs, they have strength.

When coining words for the Army, it might be well for us to look to the methods of the advertisers. The words *jeep*, *peep* and *GI* (this is pronounced like a one-syllable word) are short and easy to say, easy to remember, and lend strength to expressions in which they are used.

But why do advertisers use longer words like *Dynaflo*, *Solium*, and *Sanforized*? If you will pronounce these words you will find that they have euphony. Words of French origin such as *echelon*, *defilade*, and *camouflage*, once they are learned, are easy to say and remember because of their euphony. This, in addition to their historical background, is one reason for their popularity in our military language. However, they lack one thing which the shorter words have: punch. Their meaning is fairly well understood—but still a bit hazy. Perhaps the advertisers use longer—and hazier—words for a reason: to lend a sort of mystical aura to their mechanical gadgets, chemical mixtures, and industrial processes.

Army slang is a very fine source for finding new Army terms. Many accepted Army terms like these probably had their origin in slang: *mess*, *dud*, *jump off*, *on the way*, and *straggler*. Slang words such as *bazooka*, *the jacket*, *ack-ack*, *jeep* and *GI*, if accepted, would make for easier reading of our military literature. Of course, propriety and good taste must be considered when accepting slang terms. Such terms as *gruesome two-some* for WAC regulation shoes and *armored heifer* for canned milk might not be considered serious in nature and dignified in tone.

In conclusion—

Categorizing names are confusing, hard to say and to remember.

Numbers and symbols are, perhaps, even more confusing than categorizing names.

There is an urgent need for short, descriptive names for equipment and processes that are in common use in the Army.

Use of easily remembered names will make our training processes easier and make our literature more forceful.

If new names are to be given to equipment, ideas, or processes, advertising principles and Army slang will help the Army to invent or select these names.

CLAIMS AGAINST THE GOVERNMENT

Colonel Irvin Schindler

You can't collect from the Government for the snakes you left in your locker when you went AWOL, but you can be reimbursed for many valid losses, if you understand the law

CLAIMS are settled by the Army under four principal statutes, some of which are of direct interest to service personnel as actual or potential claimants. In a more general sense, these statutes are all of interest to military personnel, particularly commanders, by reason of the part they may play in the welfare and morale of personnel and, in some instances, in the relationship between the troops and the surrounding civilian population. In both respects the beneficial effects of the claims laws may be largely lost through lack of knowledge of the laws themselves and their implementing regulations. Hundreds of otherwise allowable claims of service personnel, for example, have had to be disallowed because the claimants were not aware of the requirement that their claims be filed within the period of time specified in the act or that they show good cause for their failure to do so. Ignorance of the law is not regarded as good cause for delay in filing, but neither is it a good antidote for the disappointment that follows disallowance of a claim. Accordingly, all soldiers should be generally familiar with the claims laws and regulations.

Each of the several claims laws under discussion here is implemented by Army regulations in the 25- series. The Military Personnel Claims Act of 1945 (implemented by AR 25-100) is the act of principal direct interest to military personnel and civilian employees of the Army as potential claimants. If you are in either of these categories and suffer damage to

or loss, destruction, capture, or abandonment of personal property, incident to your service, this is the act under which you may be paid for the loss. Claims are paid for such losses as those occurring during the transportation of household goods between stations, for property lost or damaged in the burning of assigned quarters, and so on. Numerous claims have been paid for the property that personnel were forced to abandon in Korea when the Communists launched their invasion of South Korea. Paragraph 3, AR 25-100, gives examples of the principal types of claims payable, and paragraph 4 lists types which are expressly excluded.

If the loss was caused in whole or in part by your own negligence or wrongful act, your claim is not payable. The law requires that the claim be presented in writing within one year after the occurrence of the accident or incident out of which it arose, except that if war exists or intervenes within two years a longer time is allowed, provided good cause is shown for any delay beyond one year. Failure to understand the full import of this provision of the act has produced many frustrated and disappointed claimants. Since it usually takes some time to gather the necessary supporting evidence, procrastination is not recommended.

Under the act, claims are paid only to the extent that the property for

COLONEL IRVIN SCHINDLER, Judge Advocate General's Corps, is chief of the Claims Division of the JAGO, which has been decentralized from Washington to Fort Holabird, Maryland.



which claim is made is determined to have been reasonable, useful, necessary or proper for the claimant to have had under the circumstances of his service at the time of the loss. If household goods are destroyed in the burning of quarters and a claim is made for three pianos, the second and third probably will be disallowed under this limitation. A claim in the amount of \$100 for four poisonous snakes destroyed when they were found in the locker of an AWOL was recently disallowed on the ground that they were not reasonable, necessary, and so on.

ANY military person or civilian employee of the Army whose official or personal responsibilities encompass the field of loss or damage to personal property incident to service should become familiar with the provisions of AR 25-100.

If one of your drivers negligently injures another person or damages property while driving on official business, the injured party probably can collect from the Government under the Federal Tort Claims Act. This act has been in effect since 1 January 1945 and covers property damage, personal injury and death caused by the negligent act or omission of an employee of the Government acting in the scope of his employment. Claims not exceeding \$1,000 may be settled administratively by various executive agencies of the Government, including the Department of the Army; hence AR 25-70. The Federal district courts have exclusive original jurisdiction of claims under the act in excess of \$1,000.

Driving of Government vehicles is the most prolific but by no means the only source of claims under this act. Geographically the act extends only to the continental United States, its territories and possessions. It is not available in occupied areas. Within the areas covered, almost anyone can be a claimant. There are, however, some interesting Federal court decisions relating to its applicability to members of the Armed Forces. In a case decided in 1949 the U.S. Supreme Court held in favor of the estate of a soldier who, while absent on furlough, was killed through the negligence of an employee of the Government (*Brooks v. U.S.*, 337 U.S. 49). In three cases decided on 4 December 1950 the Supreme Court takes the view that personal injury and death claims of service personnel, incurred

in a duty status, are not within the purview of the Federal Tort Claims Act (*Feres v. U.S.*; *Jefferson v. U.S.*; *U.S. v. Griggs*; Nos. 9, 29, and 31, October term, 1950).



WHETHER or not the U.S. is liable under this act is determined in accordance with the law of the place where the accident or incident took place. U.S. liability for an injury incurred in Pennsylvania, for example, is determined in accordance with Pennsylvania law. The U.S. is not liable unless a private individual would be liable under the same circumstances. Although military personnel may be claimants under the act in certain circumstances, the principal interest of the military man in the Federal Tort Claims Act lies in the fact that it provides an administrative means of paying claims of civilians who have been injured in one way or another by the negligent acts or omissions of military or civilian employees of the Armed Forces. Since such acts or omissions may result not only in claims against the Government under the administrative regulations (where the amount involved does not exceed \$1,000) but also in litigation without monetary limitation, all responsible authorities should make sure that a proper investigation is made promptly of each incident which may give rise to a claim.

THE act of 3 July 1943 (AR 25-25) covers losses caused by our Armed Forces or individual members thereof, and losses which are incident to the noncombat activities of such forces. The Secretary of the Army and his designees may settle claims arising from the activities of Army personnel, military and civilian. The Secretary of the Navy and the Secretary of the Air Force have similar authority as regards their personnel.

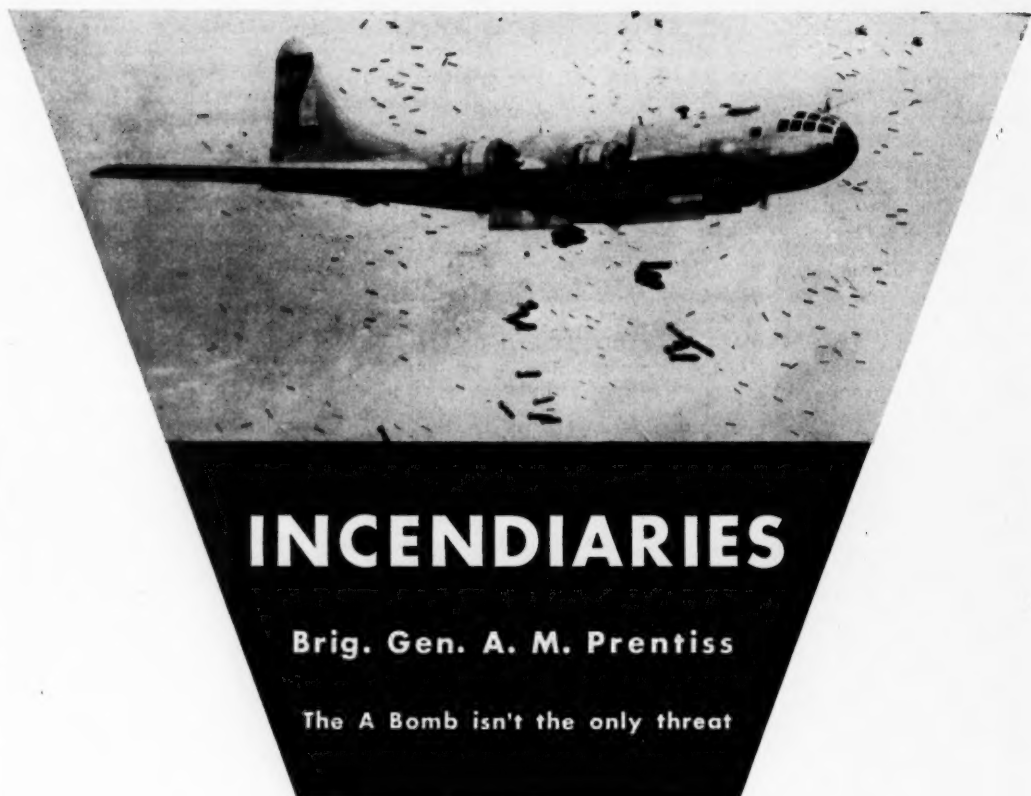
The field in which this act and regulations operate has been largely taken over by the Federal Tort Claims Act and AR 25-70. They have remaining usefulness, however, particularly with regard to maneuver

claims and those resulting from such activities as gunfire and detonation of explosives not involving negligence. In overseas areas they are useful in settling certain claims which cannot be settled under the Foreign Claims Act. Their use may again become quite significant in connection with training and other activities of an expanding Army.

The Foreign Claims Act (AR 25-90) was enacted in 1942 after it had become evident, as a result of the presence of our troops in foreign countries, that an effective means of settling meritorious claims was essential to the maintenance of friendly relations with the people of those countries. The act is applicable only in foreign areas and a claimant must be an inhabitant of the country in which the accident or incident giving rise to the claim occurred. Payment may be made for damage to real and personal property, personal injury, and death. Military and civilian personnel of the Army are not eligible claimants under this act but they have a vital interest in it, since their relations, and those of the Army, with the indigenous population may be affected significantly through the operation of the act. Its stated purpose is to maintain friendly relations through the prompt settlement of meritorious claims. The advantage of being on good terms with the surrounding populace needs no elucidation.

SETTLEMENTS are made for the most part by foreign claims commissions, usually in the local currency. The commissions are empowered to make settlement on their own authority in amounts not exceeding \$2,500. From that amount to \$5,000 the approval of the theater or similar commander is required, and meritorious claims exceeding \$5,000 are reported to Congress for its consideration.

The keystone of the Army claims system is to be found in the claims officers who make the direct contact between claimants and the system. The responsibility for their appointment and conduct rests upon the commander (see paragraph 5d, AR 25-20). Whether or not the Army and its individual members enjoy the numerous direct and indirect benefits of the various claims acts depends to a very large extent upon the type of claims officers who are appointed and the standard of efficiency they are required to maintain.



INCENDIARIES

Brig. Gen. A. M. Prentiss

The A Bomb isn't the only threat

NOWADAYS we are so occupied with finding a defense against the atomic bomb that the perils of other types of bombs are forgotten. Mr. David E. Lilienthal, the former chairman of the Atomic Energy Commission, noted this in a recent magazine article when he observed that this "fixation on the big A-bomb war left us with little interest and no capacity to focus attention on any lesser or more limited kind of warfare."

Although the atomic bomb vastly

exceeds all other weapons in destructive power, our concentration upon it to the exclusion of all others jeopardizes our national security. Chief among these other weapons is the incendiary bomb which, in the aggregate, wrought far greater destruction upon the cities of Japan than the two atomic bombs. And even though a larger tonnage of incendiary bombs was used in these attacks, the comparative results, in terms of military effort, were not so disproportionate as to justify ignoring the threat of incendiary raids upon our cities. Our almost exclusive concentration on atomic defense is like a man who, in seeking to secure his house, barricades his front door but leaves his back door open.

In World War II, the most widely used incendiary agents were thermite, magnesium and "solid oil." Thermite is a mixture of iron oxide and powdered aluminum which has long been used in industry for welding iron and steel. When ignited, this mixture

produces an enormous heat which is sufficient to raise the temperature of the reaction to about 3,000 degrees centigrade, and the resulting molten slag prolongs the heating effect after the reaction ceases. However, when thermite is used alone, its incendiary action is confined to a small area, and a very large percentage of its heat energy is wasted because it is set free so rapidly. Against a readily ignitable material which allows the conflagration to spread easily, thermite is very effective, but such materials are not often present in a target.

Between the world wars, the Germans developed a new type of incendiary agent, in which thermite was used as the primary igniting substance and metallic magnesium was the principal incendiary material. When ignited by the thermite this bomb was capable of burning for a considerable time with a large, hot flame. When heated to its ignition point magnesium combines vigorously with oxygen and burns with a dazzling white heat

BRIGADIER GENERAL A. M. PRENTISS, retired, is the author of *Chemicals in War*, published in 1937, *Civil Air Defense*, published in 1941, *Civil Defense in Modern War*, published in July 1951, and a number of articles on related subjects published in *Infantry Journal*. Prior to the First World War he served in the Cavalry, Coast Artillery Corps and Ordnance. In 1917 he joined the Chemical Warfare Service and concluded his active military career when he retired in 1946. He now lives in Hartford, Connecticut.

and cannot be quenched with water. It is completely consumed by combustion and hence does not deposit a slag, as in the case of thermite. The combination was one of the most effective incendiary agents used in World War II.

During the war we also developed and used two incendiary agents of the "solid oil" type: first, a saponification of gasoline in methyl methacrylate (a liquid resin); and later, gasoline saponified in a mixture of aluminum napthenate and coconut fats, called "napalm," which has been used so effectively in Korea. These formed stiff, jelly-like substances that could be readily loaded into light metal bombs and ignited by the bursting charge used to open the bomb. When the casing burst these fillings were scattered in small lumps which adhered firmly to whatever they came in contact, and burned fiercely with a hot flame long enough to set fire to all ordinary inflammable materials. Against light wooden structures, such as in the cities of Japan, these incendiary agents were more effective than the thermite-magnesium bombs.

BASED on World War II practice, incendiary bombs are of two types—scatter type and intensive type. Scatter type incendiaries are designed to attack extensive target areas, such as cities, where the object sought is widespread conflagration among structures and materials of more readily ignitable and combustible substances. Intensive type bombs are designed for setting fire to specific buildings and installations of heavy construction

more difficult to ignite. Scatter-type bombs may be of either the magnesium or solid oil class, and vary in size from two to six pounds. Intensive-type bombs are of solid oil and vary in size from 100 to 500 pounds.

Early in World War II, the British and Americans used a two-pound magnesium bomb, copied from the German one-kilogram "electron" bomb. It was soon found, however, that such bombs had two serious limitations. They were too light to penetrate heavy roofs and they could not be placed with satisfactory accuracy and density on the target areas from high altitudes. To overcome these difficulties we increased the size of the bomb from two to four pounds and modified the filling by adding to the thermite certain oxidizing agents, the new mixture being known as "thermate." The heavier bombs were able to penetrate heavy roofs and one or more wooden floors under the roof and the amount of flame and heat generated was greatly increased. Since thermate contains its own oxygen, it cannot be extinguished by quenching or smothering. Except for a few ounces in the iron nose and the fuze, the whole of the magnesium bomb is consumed in the reaction of combustion which makes this type of bomb of very high efficiency.

The four-pound bombs were arranged in clusters, varying from 25 to 125 bombs, so as to give to the clusters the overall dimensions and shape of standard high explosive bombs of corresponding weight. By this means,

the clusters fitted the standard bomb racks and when released followed paths similar to those of standard high explosive bombs, thus making it possible to place these incendiary bombs on area targets with satisfactory accuracy.

DURING the latter part of the war, when we directed our attention more and more toward Japan, we found that our four-pound magnesium bombs were too concentrated to be of maximum effectiveness against the light, flimsy construction prevailing in the Japanese cities. What was needed for this purpose was a small, scatter-type bomb that would distribute its incendiary contents over a wider area in a form capable of setting fire to light wooden structures. This requirement pointed to bombs of the solid oil class, and we accordingly developed a six-pound bomb which consisted of a light, sheet metal casing filled with a "solid oil." The bomb was opened by a small explosive charge which ignited and expelled the filling, scattering it over an area of several yards in a shower of flaming gobs that adhered firmly to any contacting surfaces and burned with a sufficient intensity and duration to set fire to ordinary inflammable materials. These bombs were clustered and used in exactly the same manner as the four-pound magnesium bomb and proved even more effective against the light types of structures prevailing in the cities of Japan.

The enemy felt the full fury of fire spread by Allied bombardment in World War II. These gutted buildings are a portion of Cologne, Germany, as seen from the famous Cathedral.



For use against buildings and structures of heavy construction that are more difficult to set on fire, we developed an intensive type incendiary bomb which varied in size from 100 to 500 pounds. These bombs were filled with thermate as an initiator, and "solid oil" mixed with magnesium shavings, as the principal incendiary material, similar to our six-pound incendiary bomb. This bomb had an impact fuze ignition mechanism held in the nose, and consisted of two main parts—the steel nose and a sheet metal body with attached vanes. The thermate was contained



Incendiary bomb cluster

in a central tube which extended to the tail of the bomb. The "solid oil" was run into the body while warm and fluid and was solidified upon cooling. A small ignition charge would burst the bomb and scatter the filling which burned with tremendous heat and flame. While these intensive-type bombs were not used extensively, they were very efficient.

ONE of the most important effects of an incendiary attack from the air is the capability of one bomber starting a large number of fires simultaneously over a considerable area. These fires may spread out and coalesce into a general conflagration, or fire storm, which not only burns out the target area, but also often sweeps over wide adjoining areas and destroys everything in its path. The number of fires that may be started simultaneously cannot be precisely estimated, but the following calculations will give some indication of what can be expected.

In large cities in this country the average proportion of open spaces to built-up areas may be taken as about three to one, or about twenty-five per cent roof area. Accordingly, for every four bombs dropped, one may be expected to hit a building, and the remaining three to fall in streets, gardens, yards, and open ground, where they would burn themselves out without doing any serious damage. Supposing, therefore, that a single B-29 bomber carrying 5,000 four-pound bombs has reached such a city, one

hit in four would mean about 1,250 hits. But, of these, about one-third either might glance off sloping roofs and not penetrate, or, penetrating, might fail to function. The remaining 833, or approximately seventeen per cent of the bombs dropped, would probably cause fires. The size of the area in which these fires may occur would depend upon the speed at which the bomber was flying, how quickly the bombs were released, and the height from which they were dropped. For instance, flying in a straight line, at 300 mph at a height of 25,000 feet or over, and releasing thirty bombs per second, the bomber would drop its 5,000 bombs in a little under fourteen miles and would start one fire every thirty yards over an area about one-fourth of a mile wide and nearly fourteen miles long. Actually, such attacks would be made in squadron formations, which means, of course, that the number of fires would be multiplied by the number of planes in the squadron.

INCENDIARY bombs were used in aerial attacks on cities in ever increasing quantities during the progress of World War II and their effectiveness was conclusively demonstrated by the widespread damage they caused. An outstanding example of the effectiveness of incendiary agents in World War II was Hamburg, Germany (population 1,682,000), where three attacks in July 1943, with incendiary and high explosive bombs destroyed fifty-five to sixty per cent of the city. These attacks seriously damaged an area of thirty square miles, completely burned out 12.5 square miles, wiped out 300,000 dwelling units, and made 750,000 people homeless. German estimates range from 60,000 to 100,000 persons killed, many of them in shelters where they were reached by carbon monoxide poisoning caused by the fires.¹

In commenting on the devastation wrought by incendiary bombing in World War II, Mr. Russell J. Hopley² wrote:

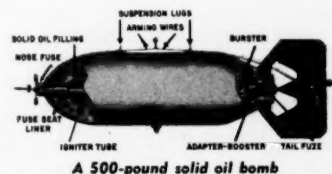
Fire was the great destroyer in World War II. Incendiaries alone, and in combination with high explosives, were responsible for heavy destruction in at least fifty-four principal cities of Germany and sixty-five cities in Japan before the atomic bomb was employed. In few bombed cities was the destruction less than twenty per cent of all buildings, and in some cities of Japan the destruction was over ninety per cent. Fires caused most of this de-

struction. In cities where the greatest fires were started, there was also great loss of life: for example, 60,000 fire deaths resulted from attacks on Hamburg in July, 1943.

Summarizing the effects of bomb damage to German cities in World War II, it is estimated that, on an equal weight basis, incendiaries were 4.8 times as effective as high explosive bombs on residential areas and against smaller industrial and mercantile properties.³

THE proven power and efficiency of incendiaries as agents of mass destruction of property and life, in World War II, make it certain that in future wars they will be used in increasing quantities and with even greater destructiveness. The threat to property damage and life in our cities by incendiaries in the next world conflict will be second only to that of atomic agents.

Notwithstanding the power of incendiary bombs to destroy large cities and industrial establishments, since atomic bombs are far more powerful and devastating, the question arises—why worry about incendiaries when atomic bombs are a much greater menace to our survival in the next World War? If we concentrate our energy on protecting our cities and industrial facilities against atomic attack, we will also provide adequate protection against incendiary and other modes of scientific warfare. Unfortunately, however, the problem is



A 500-pound solid oil bomb

not so simple and there are serious fallacies in the argument.

In the first place, the stock of atomic bombs now on hand, or that will probably be available in the proximate future, is so small as to restrict their use to only the most profitable targets, i.e., against our largest and most important critical urban and industrial communities. This

¹Over-all Report of U.S. Strategic Bombing Survey.

²"Civil Defense for National Security," U.S. Dept. of Defense, Government Printing Office, 1948.

³"Fire and the Air War," National Fire Protection Assn., Boston, Mass., 1946, page 80.

leaves the bulk of our cities and manufacturing establishments to be engaged by other weapons, chiefly incendiary bombs. If this is the case, then our first consideration for all areas of our country, outside of the largest and most important critical target areas, should be protection against incendiaries.

A second reason why incendiary bombs are a major threat to most of our cities is that they can be manufactured in vastly larger quantities than atomic bombs. Personnel of relatively limited technical ability can be quickly trained to make incendiary bombs, whereas the manufacture of atomic bombs requires personnel of much higher scientific and technical qualifications and longer periods of training. There also appears to be little or no limit to the raw materials needed to make incendiary bombs, while the essential raw materials available for atomic bombs is extremely limited. From these considerations, it follows that, so long as the production of atomic bombs is restricted by limited raw materials, qualified personnel and complex production facilities, existing stocks of atomic bombs will be supplemented by an even greater supply of incendiary bombs.

A third reason why we should give a prominent place to the threat of incendiary attack in our scheme of national security is because of the suitability of incendiary bombs for attacking a wide variety of targets, varying in size from a small manufacturing plant to a large industrial community. The employment of incendiaries in many small units permits great flexibility in their use.

Finally, protection of our cities and industrial economy against incendiary attack can be made much more effective than is possible against atomic attack. Simple fire precautions, instruction of the public (and especially householders) in how to deal with incendiary bombs, and provision of adequate fire-fighting personnel and equipment, will go far toward reducing the damage caused by incendiary bombs. This was clearly exemplified in England during World War II.

It is clear that we cannot afford to concentrate our national defense effort on protection against atomic attack to the neglect of the incendiary threat, without incurring grave risk of far-reaching disaster in any future conflict.

THE ARTILLERY PERIMETER

Lieutenant Colonel Leon F. Lavoie

THE artillery commander must keep his mission foremost in his mind. His sole purpose is to give maximum support to infantry and tanks, under all circumstances.

Like any defense, the artillery perimeter must be adjusted to the best characteristics of the terrain: developing F-O-C-O-L—fields of fire, observation, concealment, obstacles and lines of communication.

In Korea, a battalion area of 600 x 600 yards or less is considered best to provide a tight close-in impenetrable ring of weapons within mutual supporting distance. In the advent of enemy air or counter-battery, modifications must be made.

Strong outposts are needed to *detect, report* and *delay* the enemy in order to insure timely warning to the interior installations.

An interior main battle line (MBL) must be established. It must be one that can be manned in strength quickly and held at all costs.

A local and battalion reserve that can be quickly dispatched to reinforce the threatened sector is required.

Outposts

Outposts must be located to insure minimum deadspace to their flat trajectory weapons and to insure mutual support fire from adjacent posts.

Outposts must be interconnected by wire and communications checked frequently. The "hot loop" is considered best for rapid dissemination of information and monitoring.

They should be manned by two or three men. Periods of one-half to one hour, are most efficient in severe weather.

A full basic load of caliber .50 and .30 ammunition, illuminating, fragmentation and white phosphorus grenades should be kept at outposts.

Outposts must constantly be vigilant and immediately report any movement. Men on outpost duty must re-

hearse their actions to insure that they simultaneously *detect, report, and/or illuminate, and shoot* as required.

The reinforcement of every outpost must be rehearsed and routes to be taken must be known by all chiefs of sections.

Outposts must watch aircraft at night for possible paratrooper attempts.

Battery ammunition resupply points must be established, dug-in, and known by everyone.

Main Battle Line

The main battle line must be dug-in and every man's position known. Neighboring ammunition resupply points must be known to all men.

A positive system of alerting the entire command must be used to make sure that every man jumps to his feet, weapon in hand, and moves on the double to his battle station.

Practice alerts must be held frequently.

Officers must patrol the main battle line to insure effective supervision of effort, assistance in ammunition resupply and animation of command.

Illumination

When an attack is imminent on the perimeter, illumination is essential. Noise helps the enemy find our position. At the outposts, the illuminating grenade is adequate for investigative purposes.

When reliable and intense light is required the illuminating shell of the medium battalion is most effective when fired at maximum elevation with charge 1, fuze M67 cut to two or three seconds (2000 to 2500 feet).

Next to the artillery illuminating shell, M48 and M46 triplares make the best light. The M48 is particularly effective. Such flares must be used freely throughout the perimeter but must be covered by fire.

At night, one howitzer in each battery must have at least five fuze illuminating shells ready to fire on order.

In Summary

Obstacles, natural or improvised, must be covered by fire. Concertina

LIEUTENANT COLONEL LEON F. LAVOIE, Artillery, commands the 92d Armored Field Artillery Battalion in Korea. During World War II he was the executive officer and battalion commander of the 25th Field Artillery Battalion.

and/or barbed wire aprons are particularly effective when fragmentation, or white phosphorus grenades and trip flares are intermingled. Partially filled gasoline drums, oil-soaked straw sacks with waste powder increments are effective and may be ignited by tracer ammunition. Carbine and rifle white phosphorus grenades are also valuable.

White phosphorus and HE projectiles (damaged or good) may be scattered across likely avenues of approach and detonated electrically by electric cap, using field wiring to a terminal strip at any control point.

In the defense, the ammunition train should be kept with the service battery a few miles to the rear. Fully loaded ammunition trucks within the position area attract the enemy; he will try to explode them with mortar fire or grenades.

All ammunition within the position must be dug in and covered to prevent a missile from setting it off.

When attacked, provisions must be made for the employment of the primary weapon in direct fire. Chiefs of sections must maintain range cards to likely avenues of approach in their sections.

The counterattack in support of the artillery perimeter must be limited to restoring the main battle line.

Alternate positions must be selected, surveyed and wired for communications. These must be known by the command to facilitate expeditious occupation.

Close NCO and officer supervision, by inspection, is mandatory.

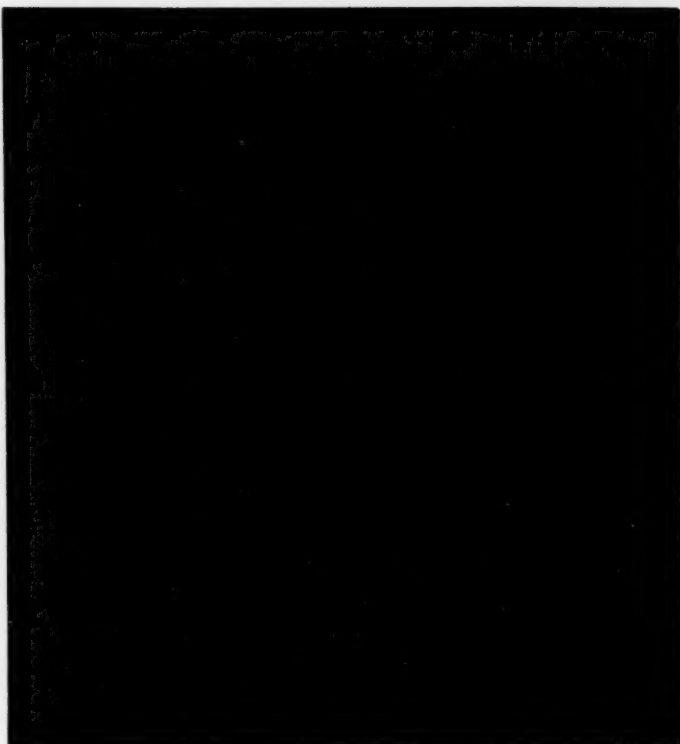
The commander must not become involved in a fire-fight but remain at his CP or FDC where radio and wire communications will keep him apprised of the situation and from which position he can best influence the action, commit his reserve and keep higher headquarters advised.

The post of the junior officer during an attack is at the outpost or on the main battle line supervising and encouraging his men.

For dependable operation in severe cold, automatic weapons must be thoroughly dry-cleaned daily. Even thin oil will so thicken as to render a weapon inoperative. Sentries should work the bolt every thirty minutes.

Blackout of area must be complete. Open fires must be forbidden. Short periods of duty on outposts do not warrant fires for warmth.

Neighboring high ground, consid-



Artillery Perimeter in Korea

ILLUSTRATED above is an actual combat position occupied in January 1951, fifteen miles west of Suwon.

Batteries were deployed in "B" formation with battalion headquarters nestled in center within an area 700 by 700 yards. Howitzers were emplaced irregularly to facilitate shifting without overhead fire. The road net was available to all units with double sentries checking traffic. Native houses within our near perimeter were cleared of occupants. Main battle line were dug-in-series of foxholes with every man knowing his post. Half-tracks forming inner perimeter were supported by main battle line. Each half-track mounted one caliber .50 and one caliber .30 machine-gun with full basic load of ammunition and grenades.

Outlying half-tracks were outposts placed to detect the enemy, give timely warning and delay his attack. All outposts interconnected by hot-loop which permitted communications from either direction and allowed for the monitoring of transmissions from any or all outposts.

High ground beyond outposts was patrolled in early morning and just before dark at night. Demolitions were 155 "projos" and/or gas drums capped and wired for electrical detonation from central control point. Trip flares and fragmentary grenades were intermingled in barbed wire as an additional alerting agency. They were covered by automatic weapons fire. Five rounds illuminating shell, fuzed and ready to fire was maintained at each battery. Contrary to conventionally accepted avenues of approach Communist Chinese frequently approached from highest ground, avoiding draws.

ered too distant for outpost installations must be patrolled daily; preferably early in the morning and just before night-fall.

The inverted V formation for firing batteries provides the best all-around security. FDC and headquarters installations habitually occupy

the center of the V. Battery A habitually is on the right and Battery C habitually on the left.

Dependent upon the degree of enemy contact the command may permanently man battle stations on the main line. Normally it is limited to that of an alert.

HUMAN NATURE

The Stuff of Leadership

Among men the majority is more good than mean, and from this may be developed the strength of the whole

IN THE history of American arms, the most revealing chapter as to the nature of the human animal does not come from any story of the battlefield but from the record of 23 white men and two Eskimos who, on August 26, 1881, set up in isolation a camp on the edge of Lady Franklin Bay to attempt a Farthest North record for the United States.

The Expedition under command of First Lieutenant A. W. Greely, USA, expected to be picked up by a relief ship after one year, or two years at most. Its supply could be stretched to cover the maximum period. But the winters were so unduly harsh that the rescue mission could not break through the ice to keep the rendezvous. During the first year, two members of the party had set a new Far North mark. The party as a whole—three officers, nineteen enlisted men, one civilian surgeon and the two natives—had survived a winter closer to the Pole than civilized men had ever lived before. So doing, they had remained in reasonably good personal adjustment to each other, despite the Arctic monotony. The discipline of the camp had been strict. Rules of subordination, sanitation, work-sharing and religious observance had been maintained, without major friction occurring in the life of the group. Lectures were given regularly, and schools were organized. Though it is recorded that the men became melancholy, sleepless, and irritable because

of the long Arctic night, temper was still in so good a state that an honor system within the camp meted out extra duty to any man using an oath.

The comradely feeling remained alive within the party throughout the first winter, though morale had its first blow when Greely issued an unwise order forbidding enlisted men to go more than 500 yards from the base without permission. The strain was beginning to tell, but there was no fatal rift in the working harmony of the group while supply and hope remained reasonably full.

But June of the second year came and passed, and no relief ship arrived. In August, Greely decided on a retreat, intending to fall back on bases which were supposed to hold food stores. Thereafter disaster was piled upon disaster, most of it having to do with the lack of food, and the varying animal and spiritual reactions of men to a situation of utmost desperation. When the Greely Expedition was at last rescued at Cape Sabine on June 22, 1884, by the third expedition—the Revenue Cutter *Bear* and the *Thetis* under Commander Winfield S. Schley, USN—only seven men remained alive. Even in these, the spark of life was so feeble that their tent was down over them and they had resigned themselves to death. Two died soon after the rescue, leaving five. Most of the other twenty had perished of slow starvation, but not all. Some had been shot. Others had met death

with utmost bravery trying to save their failing comrades.

All that happened to Greely's party during the months of its terrible ordeal is known because of a diary which records the main things—the fight of discipline against the primal instincts in men, the reversion of the so-called civilized man to his real type when he knows that death is at his elbow, the strength of unity which comes of comradeship, and also the weakness in some individuals which makes it impossible for them to measure up to honor's requirements.

Men are of all kinds. Some remain base, though given every opportunity to develop compassion. Others who may appear plodding and dull, and have been denied opportunity, still have in them an immortal spark of love for humanity which gives them an unbreakable bond with their fellows in the hours of crisis.

WHAT the case history of the Greely Expedition proves is that *in the determining number of men, the potential is sound.* Given a wise, understanding leadership, they will stand together, and they will either persuade the others to go along, or they will help break them if they resist. If that were not the truth of the matter, no military commander in our time would be able to make his forces keep going into battle.

Until the end, discipline was kept

From *The Armed Forces Officer*. Washington: Government Printing Office, 1950. \$1.50

in Greely's force. But this was not primarily due to Lieutenant Greely, the aloof, strict disciplinarian who commanded by giving orders, instead of by trying to command the spirits and loyalties of men. That any survived was due to the personal force and example of Sergeant (later Brigadier General) David L. Brainard, who believed in discipline as did Greely, and supported his chief steadfastly, but also supplied the human warmth and helping hand which rallied other men, where Greely's strictures only made them want to fight back. Brainard was not physically the strongest man in the Expedition, nor necessarily the most self-sacrificing and courageous. But he had what counted most—mental and moral balance.

Among the most fractious and self-centered of the individuals was the camp surgeon, highly trained and educated, and chosen because he seemed to have a way among men. Greely was several times at the point of having him shot; the surgeon's death by starvation saved Greely that necessity.

Among the most decent, trustworthy, and helpful was Jens, the simple Eskimo, who died trying to carry out a rescue mission. He had never been to school a day in his life.

There were soldiers in the party whom no threat of punishment, or sense of pity, could deter from taking advantage of their comrades, rifling stores, cheating on duty and even stealing arms in the hope of doing away with other survivors. When repeated offense showed that they were unreformable, they were shot.

But in the greater number, the sense of pride and of honor was stronger even than the instinct for self-preservation, though these were average enlisted men, not especially chosen because their records proved they had unusual fortitude.

Private Schneider, a youngster who loved dogs and played the violin, succumbed to starvation after penning one of the most revealing deathbed statements ever written: "Although I stand accused of doing dishonest things here lately, I herewith, as a dying man, can say that the only dishonest thing I ever did was to eat my own sealskin boots and the part of my pants."

Private Fredericks, accused in the early and less-trying period of meanness and injustice to his comrades, became a rock of strength in the weeks

when all of the others were in physical collapse or coma, and was made a sergeant because of the nobility of his conduct. Yet this man's ambition was to be a saloonkeeper in Minneapolis.

There is still an official report on file in the Department of the Army which describes Sergeant Rice as the "bravest and noblest" of the Expedi-

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

A man cannot lead if he is running behind.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

tion. He is identified with most of its greatest heroisms. The man was apparently absolutely indomitable and incorruptible. He died from freezing on a last forlorn mission into the Arctic storm to retrieve a cache of seal meat for his friends. Fredericks, who had accompanied him, was so grief-stricken at the tragedy that he contemplated dying at his side, then reacted in a way which signifies much in a few words, "Out of the sense of duty I owed my dead comrade, I stooped and kissed the remains and left them there for the wild winds of the Arctic to sweep over."

SUCH briefly were the extremes and the middle ground in this body of human material. At one end were the amoral characters whose excesses became steadily worse as the situation blackened. At the other were Brainard and Rice—good all the way through, absolute in integrity and adjusted perfectly to other men. In between these wholly contrasting elements was the group majority, trying to do duty, with varying degrees of success. That would include Greely, strong in self-discipline but likewise brittle. It would include Lieutenant Lockwood, a lion among men for most of the distance, but totally downcast and beaten in the last dreadful stretch, Israel, the youngest of the party who won the love of other men by his frankness and generosity, Sergeant Gardiner who was always ready to share his scraps of food with whoever he thought needed them more, Private Whisler who died begging his comrades to forgive him for having stolen a few slices of bacon, and Private Bender who alternated between feats of heroism and acts of mis-

creancy.

Other than their common experience, there was probably nothing unusual about this group of men. They were an average slice of American manpower as found in the services of that day, and in the fundamentals, men have changed but little since. Those who had the chance to study American men under the terrible rigor of Japanese imprisonment during World War II give an analysis not unlike the chronicles of the Greely party. In certain of the prisoners, character, and sanity with it, held fast against every circumstance. In others, some of whom had been well educated and came from gentle homes, the brute instinct was as uppermost as in an East African cannibal.

From such crucibles as these, even more than from the remittent stresses of combat in war, comes the clearest light on the inner nature of man, insofar as it needs to be understood by the officer who may some day lead a force into battle.

Snap judgment on the data might lead to the conclusion that every individual is exactly according to his own mould, that influence from without can not catalyze character, and that hence training has little to do with winning loyalty and instilling dutifulness. That would be as radically false as to believe that training, when properly conducted, can make all men alike and can infuse all ranks with the desire for a high standard. The vanity of that hope can be read out of what happened to the force at Cape Sabine. But the positive lesson glows even more strongly. The good Sergeant, Brainard, wrote of his Lieutenant, Lockwood, that he "loved him more than a brother." It was the service which taught him the worth of that attachment; Brainard's superb courage developed initially out of his unbounded admiration for Lockwood's dauntlessness, and in time the copyist outdistanced the model. Emotionally, Greely and Brainard were quite unlike. One was a New England Puritan, the other a hard-boiled sergeant. But they became as one in the interests of the force; service training had made that possible.

PSYCHOLOGISTS tell us that every sense impression leaves a trace or imprint of itself on the mind, or in other words, what we are, and what we may become, is influenced in some measure by everything touching the

circumference of our daily lives. The imprints become memories and ideas, and in their turn build up the consciousness, the reason and finally the will, which translates into physical action the psychological purpose. In the process, moral character may be shaped and strengthened; but it will not be transformed if it is dross in the first place. That is something which every combat leader has learned in his hour under fire; the man of whom nobody speaks good, who is regarded as a social misfit, unlike and unliking, of his comrades, will usually desert them under pressure. There are others who have the right look but will be just as quick to quit, and look to themselves, in a crisis; underneath, they are made of the same shoddy stuff as the derelict, but have learned a little more of the modern art of getting by. Leadership, be it ever so inspired, can not make a silk purse from a sow's ear. But as shines forth in the record of Greely and his men, it can reckon with the fact that the majority is more good than mean, and that from this may be developed the strength of the whole. In the clutch, the men at Cape Sabine who believed in the word "duty," and who understood spiritually that its first meaning was mutual responsibility, remained joined in an insoluble union. That was the inevitable outcome, leadership doing its part. The minority had no basis for organic solidarity, as each of its number was motivated only by self-interest. Goodwill and weakness may be combined in one man; bad will and strength in another. High moral leading can lift the first man to excel himself; it will not reform the other. But there is no other sensible rule than that all men will be approached with trust, and treated as trustworthy until proved otherwise beyond reasonable doubt.

To transfer this thought to even the largest element in war, it will be seen that it is *not primarily a cause which makes men loyal to each other, but the loyalty of men to each other which makes a cause*. The unity which develops from man's recognition of his dependence upon his fellows is the mainspring of every movement by which society, or any autonomy within it, moves forward.

It is a common practice to say "men are thus-and-so." Nothing is more attractive than to make some glittering generalization about the human race, and from it draw a moral for the instruction of those who work

with human material. But from all that we have learned from the experience of men under inordinate pressure, either in war or wherever else military forces have been sorely tested, it would be false to say either that the desire for economic security or the instinct for self-preservation is the driving force in every man's action. To those who possess the strength of the strong, honor is the main shaft; and they can carry a sufficient number of the company along with them to stamp their mark upon whatever is done by the group. No matter what their personal strength, however, they too are dependent on the others. There is no possibility of growth for any man except through the force, and by the works of those about him, though the manner of his growth is partly a matter of free choice. To most men, the setting of the good example is a challenge to pride and a stimulus to action. To nearly every member of the race, confidence and inspiration come mainly from the influence which living associates have upon them. That training is most perfect which takes greatest advantage of this truth, employing it in balance toward the development of a spirit of comradeship and the doing of work with a manifestly military purpose. Peace training is war training and nothing less. There is no other basis for the efficient operation of military forces even when the skies are clear. *But no commander or instructor can convince men of the decisive importance of the object if he himself regards it as only an intellectual exercise.*

THE Army's "Brief on Practical Concepts of Leadership," published 1 January 1950, well points out the desirability of leaders realizing it is vain to expect that training can bring men forward uniformly. The better men advance rapidly; the men of average attainments remain average; the below-average lose additional ground to the competition. In consequence, the chance for balance in the organizational structure depends upon the leader progressing in such close knowledge of his men that those who are strong in various aspects of the team's general requirements compensate for the weaknesses of others, irrespective of MOS numbers. It is not less essential that the followers know each other and prepare themselves to complement each other. Obviously,

this cannot be done when personnel changes are so frequent that those concerned have no chance to see deeper than the surface.

Even when to do any labor meant sapping the small store of energy deriving from a few ounces of food each day, Greely's men kept alive the spark of morale and mutual support by maintaining a work schedule, until the day came when there was no longer a man who could stand. To fight off despondency, they held to a nightly schedule of lectures and discussions in their rude shelters, until speech became an agony because of throats poisoned by eating of caterpillars, lichens and saxifrage blossoms. In their worst extremity, Private Fredericks, unlettered but a man of great common sense and moral power, became the doctor, cook and forager for the party.

Men do not achieve a great solidarity, or preserve it, simply by *being* together. Their mutual bonds are forged only by *doing* together that which they have been made convinced is constructive. Their view of its importance is usually contingent upon what others tell them, and upon a continuing emphasis thereof. *Unity is all at one time a consequence of, and a cause and condition for great accomplishment.* Toward that end, it is neither vital nor desirable that all members of the group coincide in their motives, ideas and methods of expression. What is important is that each man should know, and to a reasonable extent incorporate into his own life the thoughts, desires and interests of the others. Such sentiments, fixed by repetition, remain as a habit during the life of the group, and provide the base for disciplined action. But when men are not thus drawn together and the cord of sympathy remains unstrung, there is no basis for control, nor any element of contact by which the group may identify itself with some larger entity and profit by transfusion of its moral strength.

The absence of a common purpose is the chief source of unhappiness in any collection of individuals. Lacking it, and the common standard of justice which is one of its chief agents, men become more and more separate units, each fighting for his own rights. Yet paradoxically, if an organic unity is to develop within any body of free men, drawn from a free society to serve its military institutions, and if the fairest use is to be made of their possibilities, the processes of the in-

stitution must embody respect for the dignity of the individual, for his rights, and not less, for his desire for worthwhile recognition. The profile of every man depends upon the space which others leave him. "Of himself," said Napoleon, "a man is nothing." But every man also contributes with his every act to the level of what his group may attain. One of the foremost leaders in the United States Navy in World War II said this about the integrity of personality: "Every person is unique. Human talents were never before assembled in exactly the same way that they have been put together in yourself. Nothing like you ever happened before. No one can predict with accuracy how you will grow in your particular combination of skills if allowed complete freedom of movement." If there is one word out of place in that statement, it is "complete"; no one has complete freedom but a buccaner, and it is for the exercise of it that organized society swings him from a gibbet. It is only when personal freedom of action operates within an area limited by the rights and welfare of others that subordination, in its best sense, takes place. To direct a body of men toward the acceptance of this principle, so that thereby they may attain social coherence as a group and greater strength of personal character, is the most solid contribution that an officer can make to the arms of his country.

HE CAN succeed in this without being godlike in wisdom or pluperfect in temper. But it is necessary at least that he be interesting, and that he know how to get out of his own tracks, lest he be over-run by his own organization. Whatever his rank, *it is impossible for any man to lead if he is himself running behind.* This bespeaks the need of constant study, the constant use of one's personal powers and the exercise of the imagination. As men advance, that which was good soon ceases to be good simply because something better is possible. Once men begin to acquire a sense of organization, they also come to take the measure of those who are over them. They will then move instinctively toward the one man who possesses the greatest measure of social energy. The accolade of leadership is not inherent in the individual but is conferred on him by the group. It does not always follow that a man can develop an influence with others which

is proportionate to his talents and capacity for work. Leadership in work is a main requirement, but if the group does not warm toward the appointed leader, if its members can not feel any enthusiasm about him, they will be hypocritical of whatever he does.

History confirms, and a study of the

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It is the loyalty of men to each other which makes a cause.

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workings of the human mind supports one proposition which many of the great captains of war have accepted as a truism. "There are no bad troops: there are only bad leaders." Taking on percentage what we already know of our average American raw material, as it had proved itself in every war, and as it has been studied in such a laboratory as the camp at Cape Sabine, no exception can be taken to that statement. On the other hand, we know equally well that leadership can be taught and it can be acquired. Much of our best material lies fallow, awaiting a hand on the shoulder, and the touch of other men's confidence, before it can step forward. This is not because men with a sound potential for leading must necessarily have an outward air of modesty among their major virtues, but because a man—particularly a young man—cannot gain a sense of his power among his fellows except as they give him their confidence, and vivify his natural desire to be something better than the average. There is no indication that at any stage of his career Gen. George S. Patton was an outwardly modest man. But in reviewing the milestones in his own making, he underscored the occasion when General Pershing, then commanding the Punitive Expedition into Mexico, supported Lieutenant Patton's judgment against that of a major. These are his words: "My act took high moral courage and built up my self-confidence." It would seem altogether clear, however, that Pershing had more than a little to do with it. Colonel W. T. Sherman had to be kindled by the warm touch of Mr. Lincoln and steeled by the example and strong faith of General U. S. Grant before he could believe in his

own capacity for generalship. We all live by information and not by sight. We exist by faith in others, which is the source toward knowing greater faith in ourselves.

ABOUT the elements of human nature, it is good that an officer should know enough that he will be able to win friends and influence people. But it is folly to believe that he should pursue his studies in this subject until he habitually looks at men as would a scientist putting some specimen under a powerful microscope.

Self-consciousness is by no means a serious fault in anyone confronted by a new set of responsibilities, and working among new companions. There is scarcely an officer who has not felt it, particularly in the beginning, before he is assured in his own presence. But if the greater part of the officer corps were ever to become absorbed in the business of taking men apart to see what makes them tick, thereby superinducing self-consciousness all down the line, an irremediable blight would come upon the services. There is no need to look that deeply. What matters mainly is that an officer will know how men are won to accept authority, how they can be made to unify their own strength, how they can be helped to find satisfaction and success in their employment, how the stronger men can be chosen for preferment from among them, and finally, how they can be conditioned to face the realities of combat.

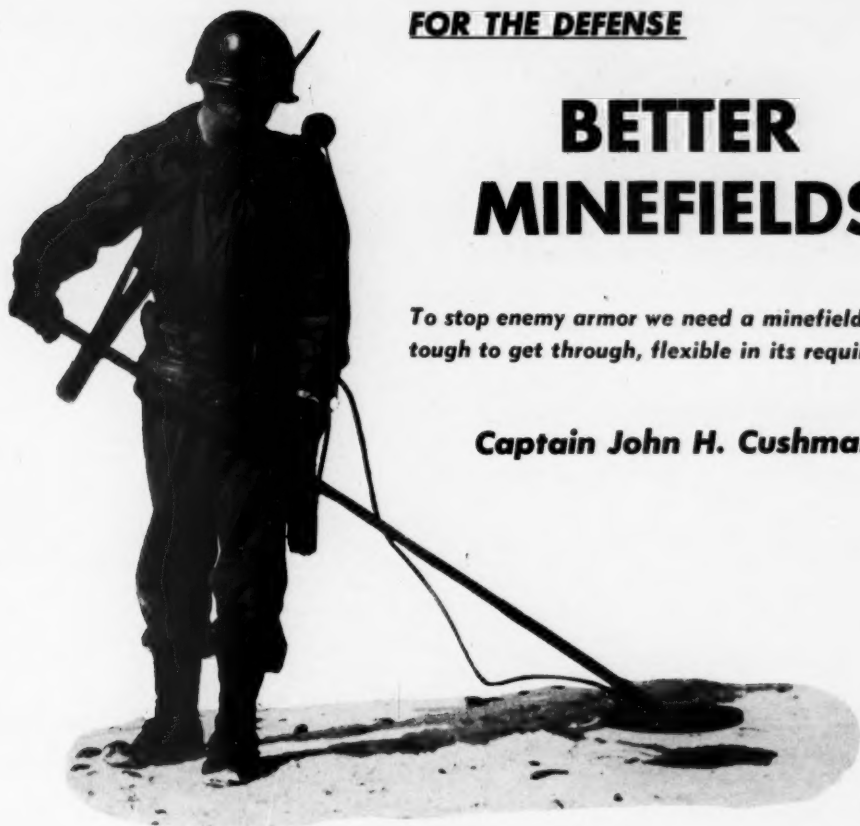
The chronicles of effective military leadership date back to Gideon and his Band. Therefore any notion that it is impossible for an officer to make the best use of his men unless he is armed with all available research data and can talk the language of the philosopher and modern social scientist is little more than a twentieth century conceit. To seek and use all pertinent information is commendable, but truth comes of seeing all things in their natural proportion. To know more than is necessary blunts one's own weapons. The application of common sense to the problem is more vital than the possession of an inexhaustible store of data which has no practical bearing upon the matter at hand. As was said by a philosopher three centuries ago: "It is remarkable in some that they could be so much better if they could but be better in some thing."

FOR THE DEFENSE

BETTER MINEFIELDS

*To stop enemy armor we need a minefield that is
tough to get through, flexible in its requirements*

Captain John H. Cushman



FORTUNATELY for us, we have never been forced to fight for months and years in large-scale defensive operations such as the Russians fought in 1941-42, and the Germans fought in Africa, Italy, and Russia from 1943 to 1945.

If we had, we would probably have a different approach toward land mines. This is because the land mine is best used in large-scale defensive warfare. Used in quantity, properly

tied in with the terrain and with other defensive weapons, minefields will stop armor.

We fought the Second World War using mines copied largely from the Germans. Since we were usually on the offensive we did not make extensive use of mine warfare, and developed virtually no new doctrine. The

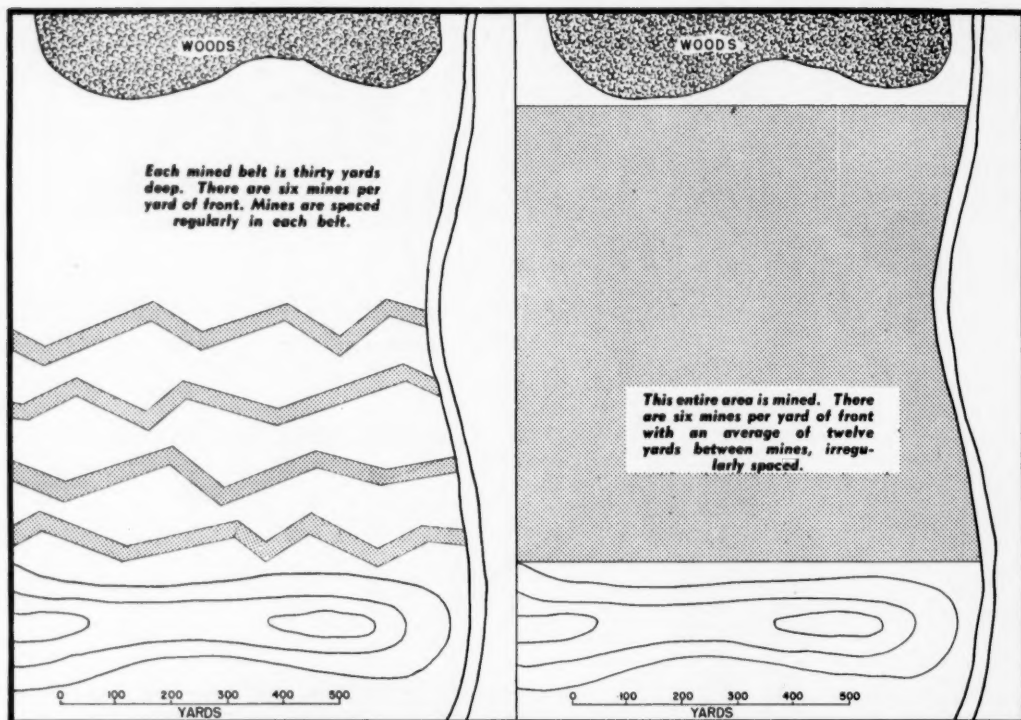
Germans and the Russians used mines by the millions. And used them effectively. It may be expected that the Soviet armies have continued to develop land mines and improve their tactical use.

Our minefield pattern as it exists today is well known. It consists of a six-row belt laid in a rigidly fixed, simple pattern thirty yards deep (see sketch). The single belt has a density of one and a half mines per yard of front. To increase the mine density, more belts are laid. Belts are laid in zig-zags which provide between belts unmined areas of varying depth. The boundaries of the entire field are marked.

This pattern and the mine warfare doctrine of our Army are the products of our experiences during the war. Since we were almost always on the strategic offensive, our major mine problems were those of clearing the enemy's minefields and avoiding cas-



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This is the present minefield pattern

This is the proposed minefield pattern

ualties when passing through our own. This experience has strongly affected our doctrine—we give a great deal of weight to the importance of ease of passage of friendly troops.

The present pattern certainly fulfills the requirements of safety to our troops. The pattern itself, the system of marking and recording fields, and the degree of authority required to lay minefields of various types, all tend to reduce the hazard to our forces should they be required to pass through the field in the attack. However, in our effort to provide a minefield safe to our side, we have developed a minefield which will not hurt the enemy very much either.

We must not minimize the importance of safety of passage by our troops. But we must be sure that the minefields we use are of maximum effect against the enemy. Otherwise we might not be able to hold the vital ground from which to launch the counteroffensive.

The major faults of our present pattern are these:

It is laid in much too obvious a pattern.

It is not deep enough.

The book says that "minefields are used to delay, break up, and canalize the enemy's attack formations." How they do this is seen best by looking at some probability figures.

WHEN the enemy comes up against a defensive position which he wants to attack with armor, his first choice is normally to attack in mass, each tank following a separate path to the objective. If there was no minefield, this is what he probably would do. But when he tries this mass attack through a minefield of only one and a half mines per yard he will average (assuming 18-inch tracks on his tanks) seventy-seven per cent casualties. It is almost one hundred per cent probable that he will lose at least half his tanks. Increased mine density, which means more mines per yard of front, would, of course, increase his losses.

To avoid these losses he can either attack with his tanks in column, the lead tanks being expendable, or he

can take time to clear a gap through the field. Either way, the minefield has done its job—"to delay, break up, or canalize" the armor attack.

Let's assume he decides to attack in column, each tank following the path of the one in front of it. As the lead tank is hit by a mine, the other tanks detour around him and continue the attack. If the enemy attacks in columns of nine tanks, through a minefield that has one and a half mines per yard, he will average about seventeen per cent casualties. The mine density must be raised to four and a half mines per yard before he has an average attrition of fifty per cent.

Of course, in the column attack, the enemy can cut down his rate of attrition by cutting down on the number of columns, putting more tanks in each column. But when he does this, he makes his armor more vulnerable to the antitank guns, tanks, artillery, aircraft, and rockets of our coordinated defense.

NOW let's suppose that the commander on the defense has judged

well the mine density which, together with the other defensive elements, will make even the column attack too costly to the enemy. The enemy, if he still intends to attack, has no choice except to clear gaps through the field.

The defender's problem now is easily stated. To lay his minefield so that it is difficult and costly to clear. The defender is applying the "theory of games" on a small scale. He wants to put in a minefield, with the right density, which is so difficult and costly for the enemy to clear that the enemy will be forced to attack without successfully clearing gaps, thereby taking prohibitive losses.

How is this done? What makes a minefield hard to clear? Such a minefield has these characteristics:

It is covered by fire. Direct observed fire is best, indirect fire can be used. Our present doctrine includes this feature.

It has an irregular pattern. Mines should be laid so that, even if he knows our pattern, the enemy soldier cannot easily predict the location of the next mine. The placing of mines need not be entirely irregular, but it must be much less predictable than our present pattern.

It must be laid in depth. The forward edge of the minefield should be at the *maximum limit* of visibility and effective range of the defensive weapons. This is good for two reasons. First, it slows down the enemy armor as soon as we can hit him with our fire power. Second, it lengthens the gaps the enemy must clear. Mine clearing is not so much the removing as it is the locating of mines. For the same number of mines per yard of front, a deep field increases the distance between mines, thereby increasing the job of finding them.

A deep field, with the right mine density¹ laid in an irregular pattern, and covered by direct or indirect fire, would be a tough nut to crack.

A glance at the sketch will give an idea of the increased effectiveness gained from a minefield such as this. The defensive position on the left employs the present minefield doctrine with narrow belts and regular placing of mines. That on the right has the same mine density and is also covered by fire, but in addition, is laid in the maximum depth possible and has mines irregularly spaced with no intervening clear areas. It is evident that this type of minefield would be of more value in stopping an attack by armor.

There is not space here to go into the details of the proposed minefield. In general, mines are laid continuously from the front edge to the rear edge of the field. Mines in each row are irregularly spaced according to a simple system. The result is a field with good coverage without an obvious pattern, and adaptable to laying with a standard drill.

Besides possessing the characteristics of being covered by fire, laid in depth, and laid without an obvious pattern, such a field has other features. If properly laid and recorded, it can easily be cleared by our own forces, when the line of battle moves forward. It permits a wide variation in mine density using the same basic pattern and procedure. A field can be laid with a low mine density at the forward edge, increasing to a very high density just forward of the defensive position.

A minefield such as this has disadvantages which would make it less useful under certain conditions. It would be difficult to lay at night or under enemy fire. The rate of laying is somewhat less than with the present six-row belt. And the field would be more difficult for our own troops to pass through in a counterattack.

A minefield so designed is particularly useful in a prolonged defensive campaign.

Let's face it. We are going to be fighting on the defensive. It is time to adjust our thinking to this concept. One of the things we should do is develop a minefield which will really stop enemy armor.



KNOW YOUR MEN

(From Armed Forces Officer)

It is only when an officer can stand up and say that he is first of all a student of human material that all technical and material aspects of war begin to conform and blend into an orderly pattern. And the laboratory is right outside the office door. Either an officer grows up with, and into, this kind of knowledge through reflecting on everything that he can learn of men wherever he fits himself into a new environment, or because of having neglected to look at trees, he will also miss the forest.

By the numbers, it isn't a difficult assignment. The schools have found by experiment that the average officer can learn the names of fifty men in between seven and ten days. If he is in daily contact with men, he should know 125 of them by name and by sight within one month. Except under war conditions, he is not likely to work with larger numbers than that.

This is the only way to make an intelligent start. So long as a man is just a number, or a face, to his officer, there can be no deep trust between them. Any man loves to hear the sound of his own name, and when his superior doesn't know it, he feels like a cypher.

As with any other introduction, an officer meeting an enlisted man for the first time is not privileged to be inquisitive about his private affairs. In fact, nosiness and prying are unbecoming at any time, and in no one more than in a military officer. On the other hand, any man is flattered if he is asked about his work or his family, and the average enlisted man will feel complimented if an officer engages him in small talk of any kind. Greater frankness, covering a wide variety of subjects, develops out of longer acquaintance. It should develop as naturally and as easily as in civilian walks of life; rank is no barrier to it unless the officer is overimpressed with himself and bent on keeping the upper hand; the ranks are wiser about these things than most young officers; they do not act forward or presumptuous simply because they see an officer talking and acting like a human being.

WHAT A

Despite superficial similarities naval gunfire is not the same as artillery fire and specialists are required to plan and control it

AT 0830 on 6 June 1944, the German defenders of *Festung Europa* might well have concluded that the Allied attempt to breach the Atlantic Wall had failed at the beach.

On Omaha Beach, the coarse shingle was littered with dead and wounded soldiers from the 29th and 1st Infantry Divisions; wounded men were drowning in the surf. Twenty-seven of thirty-two supposedly floating self-propelled DD tanks were already on the bottom of the English Channel. Only one of the eight rifle companies in assault had been able to cross the beach and fight.

Army Air Forces bombers, scheduled to drop 1300 tons of bombs during the crucial minutes before H-hour, had failed to show.

Withering fire poured down from

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thirteen ferro-concrete strongpoints, enfilading the beaches and sweeping the imperfectly marked, ill-prepared, and half opened lanes through the complex of tetrahedrons, hedgehogs, Belgian gates, *chevaux-de-frise*, and mines.

Off shore, often less than a thousand yards from this carnage, with guns muted, lay twenty-six destroyers and eleven larger ships. By standards of amphibious fire support long since normal on the other side of the world, this fire power would have equaled that of more than fifty battalions of 105mm artillery. But hamstrung by a plan which forbade their participation except on troop call, the warships could only watch.

On the beach, the lone shore fire-control party which had managed to land relatively intact set up its radios. The shore fire control party is the organization which obtains, adjusts, and controls naval gunfire support for the rifle battalion. It is made up of a spotting (forward observer) team and a liaison team.

Within a few minutes, working communication had been established with one of those destroyers to seaward. Its five 5-inch guns, translated into comparable rates of fire and weight of metal, were equal to the fire power of 1.16 105mm howitzer battalions.

The naval gunfire liaison officer of that shore fire control party made his way to the command post of one of the units at that moment being laced to pieces and reported that he had communication and was ready to commit the fires of his ship. What were the priority targets?

The general's reply, which unhappily deserves to be memorialized in the history of amphibious assault, was that he "did not think it wise to employ naval gunfire at this time."

In other words perhaps more blunt, there was a willingness at that grim moment to accept the heavy losses being inflicted by the German defenders rather than face the unknown "risk" of friendly naval gunfire in close support.

Fortunately, a higher commander took things into his own hands. At 1016, Rear Admiral John L. Hall, USN, Commander Western Task Force, could restrain himself no longer. Plan or no plan, he sent this signal:

ALL SHIPS CLOSE THE BEACH AND RENDER ALL ASSISTANCE POSSIBLE.

That was enough for the destroyers, and for several heroic LCI and LCT already at close quarters with entrenched defenders. Within moments, the destroyers were in action, taking targets under direct fire.

Less than two hours later, a radio message went out to General Bradley from a V Corps liaison officer on Omaha Beach:

OUR TROOPS MOVING UP SLOPE OF FOX GREEN AND RED.

THANK GOD FOR OUR NAVY.

OF course the hairline victory on Omaha resulted from more than eleventh-hour intervention of gunfire

COMBAT FORCES JOURNAL

THE ARMY SHOULD KNOW ABOUT NAVAL GUNFIRE

Lieutenant Colonel R. D. Heinl

support. (Although General Bradley stated afterward, "Fear of losing the naval gunfire worried me more than the likelihood of a washout in heavy-bomber missions.") But it is more than coincidence that the tide began to turn within forty minutes after Admiral Hall—plan or no plan—threw his fire support ships fully into the fight. It seemed more than coincidence to the defender of *Festung Europa*, Marshal Gerd von Rundstedt, who later said:

"Besides the power of your airplanes, the fire of your battleships was a main factor in hampering our counterstroke. This was a big surprise, both in its range and in its effect. Army officers who interrogated me after the war did not seem to have appreciated this."

In delivering this wry compliment to an American weapon which had upset him, Rundstedt, though he probably didn't know it, had joined a large group of enemies who had found naval gunfire disconcerting, deadly, and decisive.

Among these, also there was Lieutenant General Kuribayashi. In a dispatch report to Imperial Headquarters while the Iwo Jima fight raged, Kuribayashi lamented:

"I am not afraid of the fighting power of only three American divisions if there were no bombardment from aircraft and warships. This is the only reason why we have to see such miserable situations."

A multitude of similar testimonials from the receiving end have been recorded, including not a few from American Marines who—almost alone among the U. S. armed services, underwent heavy naval gunfire bombardment, first at Wake and all too often at Guadalcanal.

The upshot of these eyewitness accounts, plus the experience of Korea,

where gunfire support has pounded itself into something of a military commonplace, can be summed up in a short statement: *naval gunfire is here to stay.*

To officers of all four services who got a front-row view of naval gunfire as it matured in the Pacific during World War II, these observations may seem old stuff. But to those who knew naval gunfire only, say, as it showed at Salerno, or as it dropped fire on our own assault battalions at Sicily, the weapon may still seem a doubtful performer.

It is to those in this latter group that I want to address two ideas. First, no landing attack against real opposition succeeds without effective, heavy, close support by naval gunfire. Second, such support has been, can, and will always be delivered—*when you have the right kind of organization to harness it.* I also want to summarize what I believe Army combat forces should know about this little understood, often under-employed arm.

The quickest way to make the point that you need naval gunfire to get on and stay on the beach is to run through the major World War II assault landings where heavy opposition existed at the water's edge. In virtually every one of these, where success was touch-and-go, gunfire support was either under-employed or the quality of that support was below capability. Let's make a tabulation:

<i>Gunfire Support Adequate</i>	<i>Gunfire Support Inadequate</i>
Kwajalein Atoll	Tarawa
Eniwetok	Dieppe
Guam	Sicily
Tinian	Salerno
Utah Beach	Omaha Beach
Iwo Jima	Saipan
	Peleliu

Notice as you run down the foregoing heavily opposed landings, the hundred percent coincidence between inadequacy of D-day gunfire support and landings which came perilously close to failure. That is not saying that the fights in which naval gunfire measured up to standard were always the easy ones. Nobody who lived through Iwo Jima, say, or Saipan, would describe either as a sure thing. But the unavoidable fact is, coincidence or not, that ultimate success was never in serious jeopardy when naval gunfire was on the job.

AS for my second point—that decisively adequate naval gunfire support has been and can be delivered—we need only take notice of the successful forced landings American troops executed around the world, and under the guns of the Fleet. In a way, General Mitsuru Ushijima, commander of the defenders of Okinawa, put the matter unmistakably, in the following excerpt from his defense plan, "32d Army Battle Instructions":



"The time of opening fire will naturally vary somewhat according to the type of weapons, strength of positions, duties, etc. However, generally speaking, *we must allow the enemy to land in full*. Until he can be lured into a position where he cannot receive cover from the naval gunfire and aerial bombardment, we must patiently and prudently hold our fire."

In other words, said Ushijima, we can no longer defend a beach in the teeth of American naval gunfire. After four years, it was apparent that American amphibious firepower could enable any forced landing to succeed.

Even though naval gunfire is little known and understood, the essential information about it is simple enough.

The most important single fact—which will surprise many readers and evoke disagreement from a few—is probably this: *naval gunfire is not artillery*. Misleading, superficial similarities between the two arms have probably done more to set back full employment of gunfire support than any other single cause. Gunfire differs from artillery in characteristics, capabilities, methods of control, methods of direction, communications, and command status. It resembles artillery only to some extent in materiel and in method of adjustment and liaison.

The points of similarity are evident. But because they are, the ground officer is inclined to snap-judge a much closer identity which can be recognized as illusory only when the real differences are understood.

The first difference is that of status. Artillery is organic to the land force; naval gunfire support, however much we rely on it and use it, always remains under command of a service other than that of the user. This in turn gives rise to special problems of command, liaison, training, and teamwork between supported infantry and the source of support.

The fact that naval gunfire is outside the landing force is not wholly disadvantageous. At Okinawa, for example, 37,000 tons of naval munitions were fired at shore targets in support of ground troops. During one month on Iwo Jima, the tiny island absorbed more than 13,000 tons of ships' gunfire, directed, adjusted, and delivered at the sole behest of the troops. In the reconquest of the Marianas, 22,000 tons of naval gunfire were employed in troop support.

Every bit of this heavy support was

transported to the objective area in a Navy ship. Every round was fired through a Navy gun-barrel manned by seamen. The landing force did not have to give up a single ton of supply nor a square yard of cargo space to get that support. And when you reflect that a single packed round of 105mm ammunition weighs some fifty pounds, you can better see the magnitude of fire support which naval gunfire gives to the troops. And it is free too, because the source of that firepower is *not* organic to the landing forces.

Fire direction is also an important difference. Each artillery unit has a central "brain"—the fire direction center—which concerns itself not only with control of fires but the technical and tactical decisions required for effective attack of targets. At the heart of this "brain" stands an experienced officer, the S-3, whose entire training and experience qualify him for unerring, quick judgments in the attack of every kind of target likely to be encountered in land warfare. Backing up the S-3 is an S-2, trained in target intelligence.

Aboard the fire support ship (which, taking a modern destroyer as typical, roughly matches the firepower of a light artillery battalion) no such mechanism exists. The naval system of fire control is unmatched for mechanistic precision. But nowhere, in plotting room, bridge, or CIC (Combat Information Center is the full title) do we find the machinery or the professional talent for fire direction against shore targets.

Thus, while the artillery forward observer need only be a set of eyes for the FDC, the naval gunfire spotter in control of a fire support ship must carry an FDC under his hat. Another by-product of this striking difference between artillery and gunfire support is the natural one that individual ships or combinations of ships cannot be built effectively into the smooth, well understood and well integrated fire-direction structure of the artillery.

ALLIED to differences in fire direction are those of communication. In addition to many such disparities as those in frequency-bands, types of radio equipment and the structure of nets is the fact that gunfire support by its nature depends exclusively on radio, least secure and least reliable of rapid military communications. Artillery though it uses radio freely and

effectively, relies at bedrock on wire, far more reliable, flexible, and readily capable of integration into the troop structure of communication ashore.

Still another little understood difference between naval gunfire and artillery lies in the matter of survey. I once heard a field artillery-trained brigadier general dismiss naval gunfire as "an inaccurate weapon." When challenged on this the artilleryman pointed out the evidently shorter range-patterns of artillery and the markedly superior ability of artillery to deliver accurate unobserved fires, rain or shine, night or day. As it turned out, however, we were really talking about two different things, because there are actually no significant differences in probable error, basic accuracy of fire control systems, and precision of materiel.

Where the rub comes in is survey. By survey, each artillery piece is located, base points and check points are located, orientation is made a matter of mathematics, and the whole business is then shot in—for the precision-adjusted howitzer is sometimes mightier than the transit. But obviously you cannot survey in a man-of-war, especially if—as is the case—she is moving about. Thus, no matter how precise and well tuned the gunnery installation of a fire-support ship, the accuracy of her initial salvo in shore bombardment depends on something else besides the probable error of her guns or the alignment of the battery, or how the fire-control system happens to be purring. That something is the ability of the ship to fix her own position in the water in relation to the target—her navigational ability to decide where she is. For navigational purposes if the captain can know within a hundred yards one way or the other, he will be more than satisfied, and the best navigational methods will probably have been used, radar, loran and all. But imagine the handicap of an artillery battalion in which you could not know, at best, within plus or minus one hundred yards where the firing batteries were located.

Thus naval gunfire begins any adjustment under a real handicap, a handicap that will affect the accuracy of any given *initial* salvo, just because the ship cannot survey herself in but must fix her position by navigational means.

This limitation can be quickly overcome, however, by adjustment. That in turn brings us to still another dif-

ference—the fact that gunfire requires observation for precision fires.

THE ability of artillery to bring down unobserved fires comes quite simply from the facts that the artilleryman knows where his guns are, knows where the target is, knows his ballistical and meteorological corrections. With this information, it is a simple matter for him to pull the chain, darkness or light, and wait for the rounds to hit. In naval gunfire, as we have seen, the fire support ship cannot locate herself accurately enough all the time to be able to fire unobserved concentrations and hope to have them hit. With observation (which may be by shore fire control party, air spotter, or shipboard spotter), gunfire can be adjusted as precisely as artillery. For the benefit of doubting Thomases, one can refer to the records of Tarawa, where 5"/38 AA common was fired parallel to front lines only fifty yards from the targets; or Iwo Jima, where 5-inch was delivered overhead (with special reduced charge) at targets within seventy-five yards of Marine front lines.

Now naval gunfire enjoys a compensating advantage, even though fire support ships may have some little difficulty in knowing exactly (from a gunnery standpoint) where they are. This advantage is *mobility*.

Imagine a self-propelled medium artillery regiment capable of displacing at will at sustained speeds greater than thirty miles an hour, firing as it moves, feeding, sleeping, and house-keeping on the move, with its fire control system and its communications fully activated! Imagine, moreover, that this self-propelled regiment can rove at will many miles along the flanks of enemy territory, and that it carries, split-second ready at all times, anti-aircraft automatic weapons and gun protection equal to that of battalions on shore.

A cruiser on fire support duties is equivalent to just such an awesome regiment.

If targets develop beyond the range of artillery within the beachhead, fire support ships may move up or down the coast until they can hit those targets. If enemy armor makes an appearance, it may well be met, miles away, by a mobile force of fire support ships capable of moving along and harrying that armor as it tries to thrust home into our beachhead. If naval gunfire finds itself up against a

target in defilade, the ship simply shifts station so that her line of fire reaches behind that defilade. If hostile counterbattery makes trouble, it is easy enough for the fire support ship—if not inclined to duel it out—to move. All these advantages result from mobility.

I HAVE spent a good deal of space showing that naval gunfire is not artillery. Something else ground soldiers should understand about gunfire support is this. In its own right, gunfire support constitutes a full-time professional specialty. It requires, even within the landing force (at least by Marine Corps tables of organization) a troop organization whose sole job is to obtain, control, and exploit gunfire support for the landing force. This, incidentally, is the "price" the supported troops pay for the "free" support provided by the Navy. Although small enough in comparison to what the supported unit gains (for example, the officers and enlisted men who perform gunfire support duties within a Marine division number less than ten percent of all officers and enlisted men in the division artillery) this organization must be singly devoted to naval gunfire support. It must be and is specially organized, specially trained, and specially equipped to control it. If it is to be really effective, it cannot be part-time. This rules out any but auxiliary reliance on the artillery FO parties which, by theories widely held in the Army, can control gunfire support early in landing attacks as well as later, when not shooting artillery.

(The idea of using artillery forward observer parties for shore fire control missions is, on the face of it, most attractive. It seems to mean an economical use of related skills, and also flexibility. Where it falls down is in the differing training required for a naval gunfire spotter in contrast to the artillery FO, and in the fact that being an FO is itself a full time job [which means that not very much gunfire will be employed if it must always wait at second priority to artillery]. As a note for posterity, the idea was originated by the Marine Corps in 1940, when Marine artillery FOs were trained and given special communication gear for NGF control. But by 1943, the defects had shown up, and the Marine Corps has ever since firmly committed itself to an autonomous, coequal organization for gunfire support as an

amphibian arm in its own right.)

Not only does control of gunfire support call for a shooting organization of its own but naval gunfire needs a highly sophisticated, expert planning representation within the landing force. At the outset of this tract, you may remember my suggestion that the plan for gunfire support at Omaha Beach was defective. Although it is profitless to try to run down responsibility for this unenlightened planning, we can safely say that a major cause, if not the major cause, lay in the fact that the troop units, above regiment, included no naval gunfire specialists and included no staff organization whose unique job was to formulate realistically the needs of the landing force for gunfire support. General Omar Bradley's memoirs make it plain that he felt concern over this situation throughout the Normandy planning. Perhaps in somewhat of a Monday morning quarterback vein—considering the performance of the Eighth Air Force over Omaha on D-day—Bradley commented: "I would gladly have swapped a dozen B-17s for each 12-inch gun I could wangle."

Had such a staff organization existed (by 1944 it did, in the Pacific) it would have been immediately clear that the naval gunfire plan for the Omaha landings failed to respond to the requirements of the troops for best support. Technically, to be sure, preparation of a gunfire support plan is the Navy's responsibility. But without expertly formulated troop requirements, the Navy plan cannot stand by itself. And we all know that it is the troops who, in the final analysis, pay.

OBVIOUSLY, the general-purpose Army infantry division need not include a full-time special organization solely used on the few occasions when this division may land in amphibious attack. For this reason, the job of providing a naval gunfire organization for Army divisions has been, sensibly, allocated by joint agreement to the Marine Corps. The Marine Corps meets this commitment by maintaining a certain number of air and naval gunfire liaison companies (short title: ANGLICO) over and above its own requirement of one such company for each Marine division. Each of these companies includes shore fire control parties for each infantry battalion in a division, naval gunfire liaison teams

for each infantry regiment, and a division naval gunfire team to work at division headquarters. The commanding officer of the company, moreover, is a field officer with naval gunfire background and training, qualified for assignment as division naval gunfire officer—a job that carries much the same pattern of special staff duties in the naval gunfire field as does that of the division artillery officer.

Thus, whenever the Army requires naval gunfire liaison and shore fire control services for a division committed to an amphibious mission, a Marine Corps air and naval gunfire company will be available to do the job. Because this article is devoted to naval gunfire support, I have intentionally omitted discussion of the air liaison portion and duties of the ANGLICO. These, nevertheless, form fifty percent of the unit's duties and, correspondingly, of its organization.

Although naval gunfire support is a complex, highly technical art, what the Army at large needs to know about that art is comparatively simple. These *must*, "need-to-know" points can be quickly summarized:

(1) Gunfire support, despite superficial similarities, is a different kind of amphibious firepower from artillery or close air support.

(2) Because naval gunfire is an amphibian arm in its own right, it requires full-time, well qualified specialists in order to plan it, control it, and apply it to the enemy.

(3) The firepower of naval gunfire can be and frequently is decisive in the closely opposed landing attack. As Lieutenant General Harry Schmidt, USMC, commander of the Iwo Jima landing force, observed, "I do not think it is an exaggeration to say that it was the destruction of these masked batteries by ships' gunfire which enabled our D-day landing to succeed."

(4) Regardless of the fact that planning and delivery of gunfire support are Navy prerogatives, the troops cannot expect to get support which is fully responsive to their needs unless they formulate their requirements with clarity and detail, and then follow up the implementation of those requirements from start to finish.

If the foregoing principles are understood and acted on, the Army can realize firepower advantage equivalent to tens, perhaps hundreds, of additional artillery battalions.

But without well planned gunfire support, another Omaha Beach could be just around the corner.

TRADITION CAN HELP

Major James A. Huston

The archives of our Army are a storehouse of tradition that can be put to use in building unit pride and battle esprit

AFTER four days of intense combat in the hedgerows of Normandy, exhausted riflemen of the 134th Infantry crouched in their foxholes late in the afternoon of 18 July 1944, waiting for orders to press on. They had paid a high cost in casualties in the push up Hill 122 beyond Emelie, and now the key objective—St. Lô—lay less than a thousand yards to the south. It had been a long day of fighting and commanders and riflemen alike hoped that the order would come to dig in for the night. But there was to be no rest. The order came to continue the attack. Company commanders wondered how they could call upon their weary, nerveshattered men for yet another attack.

When the time came a company commander stood up and shouted to his men, "Let's go!" No one moved. They were frozen to their foxholes. He went up and down the line, shouting, prodding them up. He saw no movement in the company on the left and he shouted over to the commander: "What the hell is the matter? Let's get going." Then he called for his own men to come along and he jumped over the hedgerow. Machine guns and BARs opened fire. Riflemen began shooting, and they began moving faster toward the next hedgerow. The other companies were moving too, and a torrent of small-arms fire smothered the sounds of German machine guns and machine pistols. A rifleman reached the far hedgerow and climbed over—but his rifle caught in the bushes and dropped on the

wrong side. He landed beside three startled Germans, but his reaction was automatic. He grabbed a machine pistol from the hands of the first and got all three of them with a single burst. As platoons scrambled over the hedgerows, Germans fled across the meadows and through the orchards. The Nebraskans kept after them with fire. Shouts began going up all along the line—"All hell can't stop us!" "*Lah we, lah his!*" "Get that rabbit!"

"All hell can't stop us!" Tired soldiers forgot their exhaustion; scared soldiers forgot their fear. Now they were brave soldiers, and they had the Kraut on the run. There was no stopping them until they had swept into the streets of St. Lô.

St. Lô was a victory that could be credited in large part to the traditions of the 134th Infantry. While in training back at Camp Rucker, Alabama, a year earlier, Colonel Butler B. Miltonberger, its regimental commander, had told the entire regiment of how in the Philippines in 1899 when the 1st Nebraska, under Colonel Stotsenburg had launched a spirited attack and General Hale, observing the action, had shouted, "There goes the 1st Nebraska, and all hell can't stop them!"

Within the week after General Miltonberger told that story wooden signs, painted white on blue with the legend, "All Hell Can't Stop Us!" had appeared over the door of every orderly room and headquarters in the regiment. Then it showed up in bold white letters on every vehicle. The slogan became a part of the regiment.

"*Lah we, lah his*" is the official motto on the regimental crest. It is Pawnee meaning "The strong, the brave," and it too had become a part of the regimental lingo. But the men had given it a new translation: "*Lah we, lah his*—we move on Sunday!" Anything which seemed typical of the

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regiment — certain of the Old Man's rules like neckties, polished shoes, or fastened helmet straps — was likely to be called "*Lah we, lah his.*"

Though sometimes the phrase was used sarcastically, those strange Indian words were made to live, and on that battlefield at St. Lô they came alive with such force as to help make the attack win its objective.

"Get that rabbit!" was a jocular expression which had come out of Tennessee maneuvers. There, while men camped in the cold, some comic relief always resulted when someone scared up a rabbit.

THE importance of *esprit de corps* and tradition in any military unit is widely accepted. Yet, the American Army, with some of the finest of military traditions, has done little to turn its achievements into living traditions. Some traditions "just grow," like Topsy, but most of them require considerable cultivation. It is strange and sad that the Army, which has done by far the greatest part of the Nation's fighting, should envy the Marine Corps for its colorful tradition.

The Marine Corps has been highly successful in making a great deal of tradition out of relatively little combat. One of the ironies, for example, is the way the Marines sing about the halls of Montezuma when of course the Army did nearly all the fighting to Mexico City; and in one of their most famous pictures, the Marines show General Quitman, less one shoe, leading the Marines into Mexico City — though Quitman was an Army general, and it was the Army's 3d Cavalry which hoisted the flag over the National Palace ("The Halls of Montezuma") and to whom General Scott paid tribute with his famous words, "Brave Rifles! You have been baptized in fire and blood and come out steel!" (In Scott's army of 14,000 there were 300 Marines; Quitman's division included these Marines plus three infantry regiments.)

But the Army has a wealth of tradition. All it needs to do is to bring it to life. Some important steps have been taken in that direction. The Office of Military History, Department of the Army, is doing a great deal in the field of unit history. The training divisions have included in their programs a series of lectures on "Achievements and Traditions of the Army."

But this is only a beginning. Unless there is a broad program reaching the whole Army, and unless there are constant reminders to the recruit of what he has learned, the effects of the program will not be long-lasting. This is the kind of thing which demands the attention of every responsible office and agency. Repetition from many different angles of approach is the thing needed to make the tradition of the Army live in an effective *esprit de corps*.

ALL units should be encouraged to maintain their own traditions.

The 19th Infantry, "The Rock of Chickamauga," pays tribute to the second lieutenant who was left in command of that regiment, and led it from the battlefield of Chickamauga. Each year on the anniversary of the battle the senior second lieutenant commands the evening parade. Officers of the 1st Field Artillery had wine glasses in their club inscribed, "A Little More Grape, Mr. Bragg." A little study of unit history will reveal all kinds of possibilities along these lines which will add to the tradition and the pride of regiments.

One of the most effective means of promoting a respect and pride in tradition is the prominent display of attractive and dramatic pictures. This is one method which the Marines have exploited with considerable success — even if they did have to "capture" an Army general to do it. Reproductions of famous historical paintings would be satisfactory in some cases. From the time of the Mexican and Civil Wars, photographs might be more desirable. Historical events not recorded in paintings or camera films can be executed by present-day artists. A series of such pictures, suitable for mounting in day rooms, mess halls, clubrooms, and libraries should be made available to every unit. And even small units can collect and display large-size pictures illustrating prominent incidents in their own history. Pictures in the general series might include such historic scenes as these:

Washington crossing the Delaware.
Morgan's riflemen at Saratoga.
Valley Forge.
Scott's brigade at Chippewa.
Cotton bales and rifles—New Orleans.
Bragg's battery at Buena Vista.

Kearny's march.
Storming the citadel—Chapultepec.
The siege of Vicksburg.
Action at Fredericksburg.
Wayne's Legion at Fallen Timbers.
The charge up San Juan Hill.
Action in the Philippine Insurrection.
Tientsin.
Cantigny.
Moving up — Meuse-Argonne.
Hill 609.
Landing at Salerno.
The Anzio Beachhead.
Hedgerow fighting in Normandy.
The Siegfried Line.
Street fighting in Aachen.
Forest and snow—Battle of the Ardennes.
Jungle fighting in the Southwest Pacific.
Vinegar's Joe's walk out of Burma.
The return to Corregidor.
Flame-thrower tanks on Okinawa.

These are only examples of what can be had. Many of them can be obtained from the Still Pictures Branch, Army Pictorial Service. In addition to those pictures which might be prepared for framing and permanent display — in color if possible — these same pictures, and others like them, could be used in many other ways. They could be reproduced on postcards for sale in PXs and 8 x 10-inch reproductions suitable for framing could be sold.

A series of calendars with a picture of a famous battle incident which occurred during each month would be helpful. For January there could be a picture of Washington rallying his men at Princeton, or a picture of the Battle of New Orleans. Buena Vista might provide the scene for February; Gettysburg could be used for July; Saratoga (Second Bemis Heights or Freeman's Farm) for October; the Meuse-Argonne for November; the Ardennes for December.

THE display and repetition of famous slogans or battle sayings would help. A unit would be expected to give greatest prominence to its own motto, but many slogans, and many regimental mottos, really have become a part of the tradition of the whole Army. These slogans could be painted in big letters, on wooden signs, and mounted in dayrooms, orderly rooms, barracks, clubrooms,

They should become a part of the everyday language of the soldier. They should be repeated *ad nauseam*. Maybe they will invite sarcasm and even ridicule sometimes, but if they do they are imprinting themselves, and maybe some day they will be revived as battle cries when a tired company is called upon to make one more attack. The best of these slogans are those which can be given figurative meaning in everyday activities of the soldier, but always in the back of his mind, he should be aware of their origin:

Don't Tread on Me.—The Minute Men of 1775.

Don't shoot till you see the whites of their eyes.—Bunker Hill.

Do it better yet.—Alexander Hamilton, Battery D, 5th Field Artillery.

The finest regiment in the world.—Morgan's riflemen at Saratoga.

Order on Morgan to begin the game.—Gates at Saratoga.

The road to glory is open to all.—Washington's order on the Purple Heart.

Those are Regulars, by God!—British general at Chippewa.

I'll try, sir.—Miller, 5th Infantry, at Lundy's Lane.

A Little More Grape, Mr. Bragg.—“Old Rough and Ready” Taylor at Buena Vista.

Brave Rifles, you have come out steel.—Scott at Mexico City.

To the Halls of Montezuma.—Soldiers of Scott's expedition to Mexico.

When in doubt, fight.—U. S. Grant.

First catch the rabbit.—Siege of Vicksburg.

I will hold the town till we starve.—Thomas at Chattanooga.

I propose to fight it out on this line if it takes all summer.—Grant at Spotsylvania.

Hold the fort, for I am coming.—Sherman at Kenesaw Mountain.

All who are brave, follow me.—Ord at San Juan Hill.

Keep up the fire.—Colonel Liscum, 9th Infantry, at Tientsin.

LaFayette, we are here!—Americans in Paris, 1917.

Send me men who can shoot and salute.—Pershing of the AEF, 1917.

Duty, Honor, Country.—Motto of the U.S. Military Academy.

Keep the flag flying.—MacArthur at Bataan.

Withdraw hell, we'll attack!—Patton at Nancy.

Nuts!—McAuliffe at Bastogne.

Some of these slogans could be used as captions for pictures; some might be printed on match books, on calendars, on blotters, over doors, on vehicles, on baggage stickers. Recruiting posters might well use some of these historic pictures and slogans. The Army's radio programs should present series of dramatic episodes of incidents in its history which have added much to its tradition. The public should learn to associate these things with the Army. A comic-book series might do wonders with the small fry (and with soldiers).

THERE are still other visual materials that might be used. A series of large, colorful maps, enlivened with cartoons to illustrate persons, places, or events and showing notable actions in the Army's history, for example. A few might show the big picture, while the others would be more specific.

Terrain models or sand tables can be made which project scenes of famous incidents in a unit's history. The 19th Infantry would want to show the battle where it won its title of “The Rock of Chickamauga,” while the 38th Infantry might illustrate the great defense where it won fame as “The Rock of the Marne.”

Again, many of the actions belong to the tradition of the Army, and big colored relief maps showing some of the battle incidents could be given general distribution. The sponge-rubber terrain maps which proved so valuable during the war could be used. There are commercial firms equipped to produce this type of map in a highly effective way.

Another visual approach might take the form of “newsmaps,” with accompanying pictures, charts, and commentary—similar to those used in the orientation programs during the war. But instead of giving current information, they would give the news as though it were being presented at some significant time in the history of the Army. For example, one such display might be for October, 1777, and it would show a map of the battles around Saratoga, pictures of Burgoyne's surrender, of Morgan's riflemen, of contemporary New York, and it would report events as given in contemporary papers. Side maps and comment would give news of the other fronts of the war. Or a “Newsmap for July 1863” might

feature maps, news, and pictures of Gettysburg and Vicksburg, together with mention of news from other fronts. Several series of these could be prepared, and then the plates saved for use year after year so that the long-term cost would be low.

THE movies can be used to emphasize the Army's finest traditions. Good documentary films for use in training might be pieced together by a skillful editor from existing films. But there are other possibilities. Whatever the booking policies of the Army Motion Picture Service, it ought to be possible to coordinate distribution of films for post theaters at posts where training divisions are stationed in such a way that those films supplement the training being given there in “Achievements and Traditions of the Army.” One good film a week on some Army achievement would be a magnificent tradition-building device. These could be repeated during every training cycle for the new recruit audiences. No effort should be made to show these on training time or without charge; they ought to be good ones, and let the soldier pay his way as usual. Such films as “Sergeant York,” “The Fighting 69th,” “The Iron Major,” “General Custer,” or even “Geronimo” might be included.

Perhaps the motion picture studios could be persuaded to cooperate in furnishing a series of still pictures, from scenes of noted movies dealing with the Army. These could be displayed in lobbies of post theaters. Big pictures from old movies form an attractive feature along the outside wall and in the lobby of Radio City Music Hall and many theaters throughout the country. Such scenes might include Gary Cooper in “Sergeant York,” Errol Flynn in “General Custer,” John Gilbert in “The Big Parade,” James Cagney in “The Fighting 69th,” Dana Andrews in “A Walk in the Sun,” John Hodiak in “Battle-ground,” and so on.

Moreover, there might be more historical features included as short subjects on other programs. “San Pietro” makes a good short. So would “The Sons of Liberty.” There are many others.

All of these projects, plus many others, would contribute a great deal toward developing the *esprit* of the Army.

CEREBRATIONS

Our literate cocktail-hour tacticians stand to receive as much as \$10.00 for their contributions to this department. However, the price for those "dashed off" with scant consideration for the rules of composition and rhetoric will be much less. Hold them to four or five hundred words and type them double-spaced.

Light Weapons Leader

Since the new policy on Infantry MOSs is in effect, that all first-three-graders carry MOS 1745 (light weapons infantry leader), and personnel below the first three grades carry MOS 4745 (light weapons infantryman); it is believed that company commanders should put into effect a rotation policy in regard to weapons and rifle platoons. In the past it has been the SOP upon receiving a replacement in the company to assign him according to his MOS and previous experience; if he was a rifleman (745), he was assigned to a rifle platoon and acquired no experience in the weapons or headquarters platoon. Assume that this enlisted man reaches the first three grades and is awarded MOS 1745 (light weapons infantry leader); according to duties and qualifications as outlined in SR 615-25-15 he should be able to serve as a platoon sergeant of a mortar platoon or as a section leader of a light machine gun section; but with respect to these duties he has had very little if any training. However if a rotation policy had been in effect when he was assigned to his original unit he would have had, let us say, three months' experience as a rifleman, six months as a mortar man and three months as a light machine gunner. In other words well versed and trained to assume leadership in the company in any capacity.

SERGEANT DAVID R. SANOR

Filling in the Background

The study of fundamental military thought has been neglected in the education of Army officers. The names of Ardan du Picq, Jomini, Leeb, Schlieffen, Clausewitz, Douhet, Mahan, among others, carry little or no weight for many. Most officers are engrossed in the study of tactics and logistics as pertains to relatively small units. Techniques are learned well, but only infrequently is there concern for the principles underlying

these techniques, and the reasons for their application to a given strategic situation. For the most part, this stems from the average officer's lack of knowledge of fundamental theorists. While the service schools stress improvement of knowledge of fire and maneuver, military team coordination, logistics, administration in the larger sense, and branch technique, there is little discussion of the wider picture of the problems of warfare. This is understandable in view of the existent tight schedules at all service schools.

Essentially, it is up to the individual officer to acquire a knowledge of the military theorists in order to insure a well rounded military background. That is more easily said than done. While the available literature is extensive, it is also expensive. That is not an inconsiderable factor in these days of inflation. Also, many officers are stationed in foreign areas where English library facilities are sparse, if present at all.

Aside from the difficulties of getting at the books themselves, the burdens of mobilization and intensive training leave little time for wide outside reading. Yet, this phase of an officer's training should not be neglected. The Department of the Army can do something. It is quite easy to get an audience among officers and other interested personnel. Recently a number of excellent pamphlets like *More Sweat, Less Blood*, have been published for general distribution. *Officers Call* reaches all officers. In a similar manner, the Department of the Army could issue a series of pamphlets giving the meat of the thoughts and teachings of leading military theoreticians. A series of pamphlets condensing the material covered in a book like Earle's *Makers of Modern Strategy* would do the trick. These pamphlets should contain bibliographies so that the individual officer, who so desires, can be guided in further reading and self-study. In any case, these pamphlets would serve to give all officers a background knowledge that will bring more understand-

ing and thought to the day-to-day problems.

MAJOR IRVING HEYMONT
Infantry

Regimental Rotation

During the last war our army attained considerable flexibility in the composition of its corps and armies. The assignment of divisions to corps, for example, was never rigid. A corps might consist of three infantry divisions at one moment and, due to various considerations, find these divisions replaced by others a little later. Such inter-changes of divisions were quite common and created no problem for the units involved.

This same flexibility has seldom progressed to the divisional level. (In this connection it is not intended to suggest that the structure of the division be altered.) Throughout the war the same regiments habitually remained in the same division. Were we to extend the principle of interchangeability of infantry elements to the divisional level by employing a pool of reserve regiments several advantages would obtain.

In the first place the enemy would have considerably more difficulty in maintaining an accurate order of battle on our forces. Under our present system if a regiment is identified, the division is identified.

An interchange of regiments would provide better opportunities for rest and retraining. The system of granting individual leaves to a rest area is not entirely satisfactory. Instead, if an entire regiment is sent back to the rear areas all members can rest simultaneously, the regiment can reequip, and can conduct such training as is necessary to correct deficiencies noted in combat. Replacements can be absorbed easily and their status of training determined and brought up to the desired level in an orderly, planned manner.

By performing certain area duties, such as guarding line of communication installations and limited labor details, the reserve infantry regiments will reduce the number of service units required by an army and the proportion of service to combat units can be brought into a more suitable alignment. After being heavily engaged in combat, most infantry units welcome not only rest and the opportunity to retrain but also find a change in duties a pleasant relaxation. Moreover, these regiments are combat tacti-

cal units available in the rear areas in the event of emergencies such as enemy breakthroughs or airborne attacks and can be employed on counter-guerilla operations.

A regimental rotation system will give more emphasis to a regimental feeling and pride among all members of the unit. Also certain of our oldest infantry regiments, which are not divisionalized, can be assured of the opportunity of perpetuating their traditions in combat.

To illustrate, assume a type field army. In addition to its present allocation of units, the army would have in its rear areas some eight or ten infantry regiments and a reduced number of service units. Some regiments are engaged in resting, others guarding installations or engaged in other rear area duties. Periodically the army commander, after determining the condition of front-line units, can send forward a reserve regiment to replace a regiment in the line. The replaced regiment can then go through the cycle of resting, training, and undertaking assignments in the rear areas and, in its turn, replace another front-line regiment.

Such a system should, generally speaking, be applied only to the infantry and armored elements of a division. The needs of the remaining units can be adequately provided by continuing the individual replacement system.

COLONEL ROTATION

Mil Splitter

The article by Colonel F. E. Morawetz, "The Accuracy of the Eight-inch Howitzer," brought a recollection of how we licked the problem of splitting those hairs, both at relatively short and long ranges.

At Fort Sill, in the latter part of 1945 and first part of 1946, we developed a mil splitter for use in 155 howitzers SP, 155 guns SP, and 8-inch howitzers SP. It was used to obtain fine adjustments (1 yard and less) on pinpoint targets, such as pillbox apertures or cave openings. This was done at ranges of 1,000 to 4,000 yards. For example, on a command of right 1 yard, at a range of 2,000 yards, a move of one-half of a mil was necessary. At as a result of the need is very simple. By your relation 1 mil is the angle subtended by 1 yard at a distance of 1,000 yards .1 yard (3.6 inch) at 100 yards, or .05 yards (1.8 inch) at 50

Captain C. B. Judge, USNR, is preparing a history of the Naval War College at Newport, Rhode Island. The War College, which was founded by Admiral Luce, in 1884, is the oldest service college in the United States. Any material which readers may have which will throw light on the history of this institution will be most gratefully received. Personal letters, memoirs, and published articles are welcomed. Material should be sent to Captain C. B. Judge in care of the Naval War College. He promises that all material will be carefully handled and returned as soon as possible.

yards. We used the 50-yard relation. However, the 100-yard relation could be used just as well.

You take a smooth board (or piece of metal) about 18 inches long and 6 inches wide and paint it white (when need for camouflage is necessary, a color fitting the surroundings would be better). A zero point was indicated at the center. Each 1.8 inches to the right and left was indicated; each 1.8 inches representing 1 mil at 50 yards. Three mils were indicated, both right and left. Each mil was then broken down into quarters and indices were marked in a dark color.

This mil splitter was then either attached to the rear aiming post, or put on a separate post, which could be placed in front of the rear aiming post when needed.

When commands reach the guns which necessitated changes in deflection of less than one mil, the gunner can change the deflection of the piece

by aligning the crosshairs in his panoramic sight on the quarter, half, or three-quarter mil index without changing the deflection on his sight. As you can see, he can make several small moves right or left without changing his deflection setting on his sight. If the deflections do get off his mil splitter, he can then change his deflection setting to zero his mil splitter.

I do not claim any originality in the development of the mil splitter, but I did help in the development of this one and it worked very well. It should work just as well at greater ranges, though not to quite as fine an adjustment.

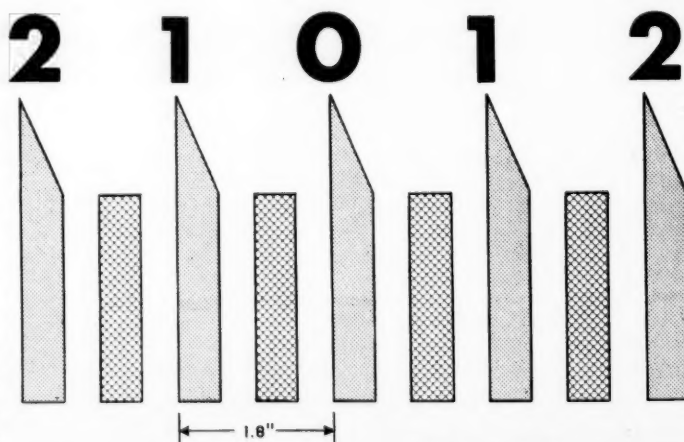
Each medium and heavy artillery battalion could make its own mil splitters at a very small cost (just the paint and the time; scrap lumber is plentiful). It will save a lot of ammunition and give quicker and better adjustments on small targets for destruction.

CAPTAIN CARL J. SMITH, JR.
Artillery

Muddy Prose

After the numerous attempts to clear the muddiness of military prose to a simple and easily understood language, you might think Army writers had taken to heart the horrible examples cited and reformed themselves for the good of all concerned. Not so, friends; not so, at all.

A recently published manual (FM 22-10, *Leadership*) is a work whose complex language is equaled only in highly technical books. This FM, which is intended to be read by all



ranks as "a practical guide for the development of military leaders, actual and prospective," starts out headed straight for failure.

It begins with spelled-out definitions of such things as a commander, a leader, leadership, and leadership principles, techniques, and traits. And these definitions can be understood by any reader. So far, so good. But not very far.

Only one page away, we are brought up short by the following paragraph:

"a. *Authoritarian and Persuasive Leadership*. There are two kinds of leadership, authoritarian and persuasive. One who is predominantly of the authoritarian type normally is recognized by the dogmatic use of authority or power. The persuasive type of leadership takes into consideration the human element with all its complexity and with all its differentiation of the physical, mental and moral capabilities and limitations of the individual . . ."

Farther along are other paragraphs on the role of psychology and the role of ethics in the development of leadership written in the same thick style.

I have no intention of condemning the hapless writer of this manual for a work on which he spent a good deal of time and effort. Much of the manual is written lucidly and should even prove enjoyable to the reader who has the courage to get to it.

As a writer of military manuals myself, I think I know some of the problems met in such work. It is unhappily true that most manuals are reviewed by military men accustomed to thinking in the language of the directive. They are also men who are not writers themselves, and are not even people for whom the manuals are primarily intended. The pseudo-military jargon affected by the higher echelons leaves the man who uses it with egg on his face.

The belief that there are two languages, one to be spoken, the other for writing, is simply a false one. There is only one language to use effectively. The words of it are plain and the meaning unmistakable to any reader.

It is well known that leadership and the ability to understand heavy prose are totally unrelated. I can see in my mind the average noncom (I was one myself) reading the manual on leadership to win another stripe. As the men in today's army say it, "Never happen!"

DAVID FIDLER

NEWS OF THE SERVICES

INFANTRY

Rangers

The Ranger Training Command at Fort Benning has 39 officer and enlisted instructors who are Korean veterans. Six of these are round-trippers—they've gone the full circle, having started out here last fall as Ranger students, gone to Korea as Ranger troopers, and now have returned to become Ranger instructors.

OCS

The first OCS class of the present series graduated on 2 August. General Walter Krueger came out of retirement to speak at their graduation. He was an especially good choice since he had served as an enlisted man before winning his commission in the Philippines in the early years of the century.

The speed up in OCS has begun with two classes a month beginning the 22-week course.

Films

Movie-wise, things are humming. The film crews and Infantry School demonstration troops are well along in the shooting of Part I, "Infantry Battalion in the Defense." This is the biggest training film of the largest sized unit ever attempted at Benning.

"Seeing in the Dark," a film on night vision, is now being made in the studios at Astoria from an Infantry School script and with a School technical adviser.

A fourth film, "Reconnaissance Patrol," is at the Signal Photo Center for final version before release.

Extension Courses

Army Extension Course activity for July shows a drop from June but a definite increase over July 1950.

The following statistics show the comparative activity for the periods indicated:

	July 51	June 51	July 50
Enrollment at			
end of month	7,742	7,752	7,946
Lessons mailed			
during month	9,794	10,650	8,123
Lessons graded			
during month	8,106	10,651	6,774
Student activity	1.046	1.360	.853

Rifle Matches

There's considerable interest at

Benning over the coming revival of the National Rifle Matches after a lapse of more than ten years. The last matches were fired in 1940. Many of the old-timers are gone so the field is wide open to young blood.

Instead of each branch having its own team, the Army is pooling its best marksmen in an All-Army team in an attempt to bring home the bacon from San Diego where the Marine Corps will be host to the country's best riflemen from 27 to 30 September.

The National Pistol Matches, revived in 1948, are to be held in San Francisco from 2 to 5 October. Here, too, the Army will be represented by an all-branch team. Leading candidate for the pistol team, which is now training at Benning, is M/Sgt Hulett "Joe" Benner, who is probably the world's best.

In elimination matches Benner unofficially tied his own world's record with the .38, firing 298 of a possible 300, and broke his own world's record of 298 with the .22 by firing 299. Wish we could say he was an infantryman, but he's assigned to the Weapons Department of the Armored School at Fort Knox.

ARTILLERY

Italian Gift

At an impressive ceremony in Rome, 8 May 1951, the Artillery School was presented a 14-volume history of artillery by the Italian Artillery School.

The presentation was made by Colonels Mario Brunelli and Antonio Duran, the outgoing and incoming commandants of the Italian school, respectively. Brig. Gen. H. Norman Schwarzkopf, MAAG chief in Italy, received the books on behalf of TAS and forwarded them to the Fort Sill Library.

Colonel Brunelli visited Fort Sill in December. During the Rome presentation, he expressed his appreciation for the courtesy extended him during his visit. He also said that he hoped the volumes would promote a lasting understanding between the two schools.

The huge volumes are beautifully bound in leather and lined with satin. They thoroughly cover the history of artillery from the days of the crude

catapults and ballistas to the modern pieces of today.

Foreign Artillery

A new course dealing with "Foreign Artillery" is being prepared by the Department of Gunnery, TAS, to be taught in the fall schedule. It initially will be taught to the advanced and the associate advanced students.

Super High-Angle Fire

Tests are being prepared by the Department of Gunnery, TAS, designed to improve the technique of high-angle fire. The actual conduct of these tests will be in the near future, with emphasis on the ability to mass fire at super high-angle elevations with the desired accuracy.

Maintenance Grads

Thirty graduates of the first Artillery Track Vehicle Maintenance Course received their diplomas from the Department of Motors, TAS, 18 August. They are now qualified to compete in promotion examinations for Track Vehicle Mechanic (MOS 3660).

The eight-week course included two weeks of instruction in each of the following subjects: Wheel Vehicle and Half-Track review; M-37 and M-41 Self-Propelled Carriages; M-5 High Speed Tractors; and M-4 and M-6 Tractors.

NCO Guide

Each enlisted man attending specialist courses at The Artillery School is given a pocket-sized "Guide for Noncommissioned Officers" during his first orientation conference on military customs and courtesies.

The booklet covers such personal qualities of good soldiers as appearance, conduct, discipline, initiative, loyalty, pride, and responsibility. It also includes a brief history of Fort Sill. It was prepared and published by the Office of Nonresident Instruction, TAS.

MG Instruction

Instruction in the caliber .50 machine gun has been added to the Department of Materiel's curricula for the Associate Battery Officers' Course and the Officer Candidate Course. The battery officers also will learn about the 3.5-inch rocket launcher.

The instruction will include familiarization firing and will be the same as that given to basic trainees. It will

increase the number of hours spent on materiel from 46 to 56.

Artillery Mechanics

The Field Artillery Weapons Maintenance Class No. 5 recently graduated from TAS with Pvt. James L. Matthews of the 424th FA Battalion earning the highest score ever attained in the course.

This course, which trains artillery mechanics (MOS 4802, now begins monthly for twelve weeks, with a quota of forty students. The basic requirements are that a student be in grade below E-4 and have a minimum score of 95 in Aptitude Area VI. Experience as a cannoneer is helpful.

Partisan Warfare

The Artillery School's Department of Airborne and Special Operations will offer for the first time this fall a new two-hour course entitled "Partisan Warfare."

Designed to be given to the Artillery Officers' Advanced Class, the course will cover the development, missions, organization, and methods of operation of partisan forces.

Combat Bulletin

The Department of Extension Courses, TAS, is including a combat bulletin with graded lessons returned to the students. This one-page mimeographed sheet contains the latest information available from Korea on the tactics and techniques employed in that theater. It has proved to be an added incentive to students to submit lessons regularly each week.

Rapid Reading

The Reading Improvement Laboratory, TAS, recently expanded its facilities so that it is now capable of accommodating 50 persons at one time.

More than half of the 305 members of the current Artillery Officers' Advanced Course volunteered to enroll in the 21-period Reading Improvement Course after tests proved the class average to be 366 words per minute, with 83 per cent comprehension. Readers ranged from 185 to 996 words per minute.

New Radios

The instructors of the Department of Communications, TAS, recently underwent a 40-hour course on the new standard series of radio sets and light-weight walkie-talkies. The course was presented by a 10-man team from

the Signal Corps Engineering Laboratories, Fort Monmouth, N. J.

With half the weight and twice the frequencies of the old set, the new walkie-talkie set is a revolutionary development. It has two antennas, and a 38-55 megacycle range. Normal operating range is eight to ten miles.

Some of the equipment was left at the School for use in the instruction of current classes.

Vu-Graph Slides

The art work has been completed for the transparencies which are to be used on Vu-Graph projectors in classroom instruction of Reserve components. The job has been forwarded to Washington for reproduction and will be available to units in the field in the near future.

Advanced Course

Over 300 officer students of the 1950-52 Artillery Officers' Advanced Course at TAS were greeted 31 July by Maj. Gen. A. M. Harper, Commandant, and Brig. Gen. W. H. Colbern, Assistant Commandant, at their first orientation conference.

The first phase of the 47-week course started 1 August and will last until 24 October at Fort Sill. The students will then report to Fort Bliss, Texas, for the second phase from 29 October until 23 December. After the Christmas holidays, they will again report to Fort Sill, 7 January 1952, and continue their schooling until 25 June.

'Copter Course

The first Transportation Helicopter Pilot's Course, currently being conducted by the Department of Air Training, TAS, will graduate the last week in October.

Instrument Course

A new Army Aviation Instrument Course has been approved by Army Field Forces to be conducted by the Department of Air Training, TAS.

The purpose of the course is to qualify Army aviators assigned to the Department of Air Training in instrument flying, and at the same time qualify these aviators to serve as instrument instructor pilots for subsequent courses. TAS has graduated 35 instrument pilots to date.

Recent Department of the Army directives require that all Army aviators obtain either a CAA instrument card or a USAF (Form 8) instrument card. As an interim plan, all conti-

mental armies are authorized to contract with one civilian flying school within their area to qualify Army pilots on instruments.

SIGNAL CORPS

Flying Messengers

The Signal Corps, which hatched the Air Force by buying its first military plane from the Wright brothers in 1909, is back in the flying business. Today in Korea it operates one of the world's biggest little airlines. This midjet airline has the job of carrying messages. In July it hauled 34,000 pounds of messages between Eighth Army and the corps headquarters. In Korea there are few roads; they are rough, and hard on ground vehicles. The solution was the use of the L-5 or "mosquito" plane. While it took a jeep two days to run from Army field headquarters to a corps CP and back, the L-5 does it in four hours or less. The first plane used put 15 to 20 jeeps to work elsewhere.

Today, with five planes, five pilots and a ground crew of seven, the Air Section of 304th Signal Operations Battalion is a busy outfit. It has hauled 82,000 pounds in a year. Its planes average 80 flights a month, with pilots putting in about 75 flying hours.

Line Is Busy

Every time Eighth Army moves it must transplant enough telephones and switchboard equipment to serve an American community of 5,000 persons. Yet the Signal Corps handles this task smoothly.

Busy Signal Corps operators at Eighth Army headquarters handle an average of 31,000 local and 5,000 toll calls each day. The peak is between 1100 and 1200 when they rush through 1,800 local and 400 tolls.

To handle this rush and provide faster service Signal Corps recently designed and delivered to Korea a 12-operator switchboard mounted inside a semi-trailer. It replaces the 6-operator mobile board now in use with 360 common battery lines, 180 magnet lines, and 105 trunks to other switchboards.

The larger board was made possible by Signal Corps design, American ability to improvise, and quick assembly by a Japanese manufacturer. When a larger board was needed, on-the-spot telephone engineers took two

6-position switchboards, rewired them to operate as one, installed them in an 11-ton semitrailer, and mounted the auxiliary equipment in a second trailer. All equipment, including vans, was furnished by the Army, and fabrication was completed in 30 days or less. Twenty-three days later the Japanese manufacturer delivered the vans complete with insulation, soundproofing and both heating and lighting systems.

Jerk-26

One of the best of the new technical "weapons" tried out in Korea is the AN/GRC-26, the Signal Corps' mobile radioteletypewriter station. Having met with no great success in World War II and owing to the rough nature of Korea landscapes, there were at first some doubts as to whether the station would prove usable there. Known to users as the Jerk-26, the unit has proved to be one of the most useful pieces of communications equipment since its appearance there months ago.

Because of rough terrain and the mineral content of the soil, amateur radio operations in Korea before hostilities often had to relay Seoul-Pusan messages through Tokyo. But the Jerk-26 got through. At Wonsan X Corps maintained three channels to Tokyo, one to Eighth Army, one to the 7th Division, and one to I ROK Corps—all of them mobile radioteletypewriter circuits.

The equipment is rugged. One communications officer says he drove it around for as much as 45 miles at a stretch. "We gave it the worst beating I've ever seen given to a piece of equipment in its class. But when it came up for test, it worked."

New OCS

As of 1 September three new OCSs began operating: the Signal School, the Engineer School, and the Armored School. Admission is open to qualified personnel from both military and civilian life. Courses are of five months duration and the program is scheduled to produce 8,000 officers annually. Graduates will be required to serve a minimum of 18 months instead of the previous mandatory time of 24 months. The leadership course of eight weeks, formerly a prerequisite, may be waived, thus permitting qualified individuals to be sent to OCS direct from basic training, or from units.

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BOOK REVIEWS

Major General, U.S. Army

MELVILLE GOODWIN, U.S.A. By John Marquand. Little Brown, 1951. 375 Pages. \$3.75.

Mel Goodwin is a major general—a major general in a book of fiction. And though you will probably be reluctant to take my word for it after the generals you've seen in other modern novels, Goodwin is not a Blimp, not a sadistic martinet, not a concrete-minded, theirs-not-to-question-why-theirs-but-to-do-or-die type. He is not even a natural-born SOB. So John Marquand, one of our top novelists, comes close to being a traitor to his class, since nearly all other American writers who have put generals into their novels have insisted that the high-ranking Army officer is, by the very fact of his rank, profession and military education, an inflexible, full-time and not always fearless stinker.

Melville Goodwin, Mr. Marquand's fine fair story tells us, was born a small-town New Englander and got an appointment to West Point in time to graduate early in World War I. He married his hometown sweetheart, did well as a young combat leader in the AEF, came back to slow promotion and the Regular Army life of an Infantryman in the twenties and thirties—a good, capable human officer like many you know—a thorough student of his profession but no bootlicker, who was picked for Leavenworth and the War College, and became an armored division commander, and a good one, in North Africa and France in the last war. Goodwin has a son who enters the service too, and in all respects Goodwin is the kind of Army man you have known and liked and respected.

But in the postwar years things start happening to Mel Goodwin which are a bit beyond the usual call of duty—the kind of thing that a novel can be centered upon these days, when a chestful of well-earned ribbons does not by itself make enough of a background of life and action on which to base a full-length story. Goodwin also becomes a national hero overnight by an act of speedy good judgment in dealing with a Soviet sentry on the sector boundary in Berlin. The Pentagon public information people get him brought home fast, and in the rapid course of publicity events that follows, Goodwin falls thoroughly in love, after thirty years of reasonably contented married life, with an attractive and wealthy woman publisher.

Part of the extensive publicity on Gen-

eral Goodwin's "heroic" act is the preparation, with Mel Goodwin's own help, of his life story for magazine and radio use. Thus, Mr. Marquand, with his expert fiction technique, brings out the story of Goodwin's full military life in a series of chapters during which a five-day interview goes forward for this purpose.

Melville Goodwin, U.S.A. is a good story, somewhat contrived in spots, but not enough so to disturb the average non-military reader. As a military reader you will notice a few things which seem not exactly accurate, but my guess is that you won't mind it either. You won't mind these small flaws in the story because you will become so interested in the realistic account of a solid, likeable and decent professional Army man.

But Mr. Marquand's most notable achievement in this book is his portrayal of the impact of Major General Melville Goodwin, U.S.A., on the sophisticated civilian group of radio and advertising people with whom he is suddenly thrown into intimate daily contact. Their set of mind is such that they hardly want to believe that a general can be a real person—as I know, and you know, most of them are. But in less than two days they find that General Melville Goodwin is indeed Mel Goodwin, man and soldier, not so vastly different from themselves as a human being.

In my belief, the Defense Department should set up a special reward. It should go to writers, both of fiction and non-fiction, who show the armed services as they actually are. On the fiction side I can think of three novelists who most certainly deserve such an award: James Gould Cozzens for *Guard of Honor*, Van Van Praag for *Day Without End* (now in quarter-book form as *Combat*), and now John Marquand for *Melville Goodwin, U.S.A.*

Which reminds me that Melville Goodwin, U.S. Army, does not fall in love with any beautiful nineteen-year-old countesses and at his age of 50-odd, take them out on a cold morning in a gondola with only a single blanket between them, or I should say, over them. Mel Goodwin's girl is not that young and she is a woman of calculating will, and Mr. Marquand does not find it necessary to his story—and it really isn't—to elaborate on their intimacies. The big element of his novel is not Mel Goodwin's admiration for a woman. It is Mel's whole character and its unclashing conflict with people of an entirely different world—it is the self-confidence of Mel, proven battle leader, with much more to him than that alone

—which is the meat of *Melville Goodwin, U.S.A.*—G.V.

Hitler in Conference

HITLER DIRECTS HIS WAR: The Secret Records of His Daily Military Conferences, Selected and Annotated by Felix Gilbert. Oxford University Press, 1950. 179 pages; Index; \$3.25.

Adolf Hitler, Professor Gilbert points out in his thoughtful introduction, continues to remain an enigma, despite the flood of revaluations and interpretations during recent years. Neither the mask of imperturbable determination to which he had schooled himself, nor the equally one-sided picture of him as a madman blindly following his intuition, will hold any longer.

The personality which has gradually come to light behind them has remained far from attractive. Gilbert emphasizes the coarseness of his language, which no translation could fully reproduce, and also his meanness, as outstanding traits in his character. But with all this, he still appears incomparably deeper and complex than the brutal bull Goering or the cynical adventurer Goebbels—subject to long spells of doubt and indecision, in which he weighed the pros and cons without being able to make up his mind, until he finally steeled himself to a decision; a crude man, full of bombast and grotesque delusions, but also a man of strangely penetrating insights and wide sweeps of thought as well as shrewd common sense. Above all, the most secretive of men, distrusting everybody and concealing his real thoughts, as he himself told Halder, even from his closest associates.

To penetrate through this armor of dissimulation to the man's ideas and motives is a difficult task, particularly since the overwhelming bulk of Hitler's statements which we possess clearly bear the stamp of having been devised for this or that effect. It is therefore extremely important historically to bring together those rare utterances in which he was off guard. And among these, the records of his wartime conferences are truly unique. "We receive his views not in the broken or reflected light of witnesses, but precisely in the form in which he expressed them—the very words he spoke."

These protocols, edited by Professor Gilbert with a care which only one thoroughly familiar with the subject can properly appreciate, are the surviving fragments of stenographic records which Hitler had instituted after a violent dispute in September 1942 in order to preserve exactly what had been said. Thus they cover only the second part of the war, when Hitler's mind had tended to lose its original elasticity, and when his conferences had begun to degenerate from major strategic discussions to haggling over individual units, temporary makeshifts and organizational and tech-

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Melville Goodwin USA

by **JOHN P.
MARQUAND**

MEL GOODWIN was a major general; a combat soldier who knew his job, and loved it, and did it without fanfare and heroics because he believed in its importance. ("Son, I can handle a division the way a chauffeur drives a car, and I could do the same with a corps, and now I've got to forget it.")

MURIEL, whom he'd married the day after his graduation from the Point, had always meant him to be a general. Which made it hard to see the service record she'd nursed along thrown out the window—or at the feet of Dottie Peale. Same thing.

DOTTIE didn't care about service records. Of course, if Mel hadn't been a general, catapulted into world fame by an international incident in occupied Berlin, she might not have seen in him those qualities she'd been looking for. But she did see them and it added a new luster to her gift for making a man comfortable.

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The activities of the Pentagon, the excitement of New York, the liberties of Paris, the crisis of battle, the life in foreign stations and the quiet of small-town New England are all part of the General's career and responsibility. The General's search for a normal life—his relationship with his sons—the conflict between the two women who claim him—his devotion to his profession—his difficulty in coping with the civilian situation in which his sudden rise to fame has thrust him—these provide the material for a superbly dramatic novel that should make the name of Melville Goodwin legendary in American fiction.

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nical details. Moreover, these records are extremely fragmentary—not more than 800 out of some 200,000 total pages, and those in so poor a state and so difficult to interpret that it would be impossible to gain much light from them on the course of Hitler's decisions. But it is remarkable how much of real significance does emerge from these charred remnants.

The most valuable part is the group of protocols from July 1943 dealing with the news of the fall of Mussolini and revealing Hitler's apprehensions for Italy as the reason for his fatal delay of the Kursk offensive. There is again toward the end of the year a highly illuminating discussion on the question of the defense of the Dniepr bend, showing Hitler weighing military and political considerations against each other. It is regrettable that the pieces preserved for 1944 and 1945 do not come up to that level, in particular, that no records of Hitler's clashes with Guderian, Heinrici, and others, in the last months have survived. Thus the protocols from this last period, with their endless discussion of futilities, tend to give but a one-sided and somewhat misleading impression of Hitler's military leadership during that final climax.

On the whole, therefore, these protocols "throw less light on the details of the German military conduct of the war than on Hitler's approach to the problems of war and his general political philosophy." In contrast to the many and, as he emphasizes, frequently highly justified criticisms which the German generals have directed since the war against Hitler's military leadership, Gilbert comes to a more favorable, or at least a more balanced, estimate. The conflict between Hitler and his generals was not, he finds, simply one between madness and reason, nor between dilettantism and professional competence. It arose, rather, from a fundamental difference in thinking. The generals, for all their professional efficiency, were inclined to regard war too exclusively in purely military terms, which Hitler considered no longer adequate for the emergencies of modern war, placing greater emphasis on such broader factors as morale, the full use of modern techniques, and, above all, political considerations.

But as Gilbert also points out, this is by no means the whole truth. "In stressing the fact that Hitler's opinions are based on more than mere intuition, on a definite concept of modern war, it is not intended to imply that he was always right or that his concept was clearly superior to that of the professionals." In fact, how Hitler directed his war remains a problem to which no general interpretation can do justice, but which can only be ascertained for each concrete instance on its own particular merits.—HERBERT ROSINSKI.

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THE KREMLIN HAS ITS WEAKNESSES

SELDOM has there been such a torrent of words on any subject as that on communism—a torrent of such force that we are battered and beaten and left gasping, wondering which expert to believe, which reformed communist is sincere, whether we should crawl into a nice, deep hole and pull it in after us.

One man who seems to make more sense than most is the British historian and authority on Russia, Edward Crankshaw, author of *Cracks in the Kremlin Wall* (Viking, \$3.50). Mr. Crankshaw is a realist; he makes abundantly clear to those who may still be unconvinced that we are in mortal danger of a world war, though it may come from accident or miscalculation rather than design.

But he also makes clear the major flaws in the Soviet state and in the satellite nations (the "cracks in the Kremlin wall") that make it unlikely that Stalin will begin World War III except as an act of desperation. Mr. Crankshaw believes—and cites evidence—that should the phony peace offensive give way to war the whole Soviet structure could and probably would collapse.

But, most important for our time, is Mr. Crankshaw's attitude of mind expressed in a paragraph of his summing-up, an attitude whose preservation is the most important thing in the world to us: "I can think of only one way in which the Kremlin may still conquer us, and that without war. It is by so frightening us (but it is we who allow ourselves to be frightened) that for fear of the enemy within we transform our own society imperceptibly into an apparatus of totalitarianism indistinguishable in essence from the society of Soviet Russia—a system which may not be criticized, whether the British parliamentary system or the American way of life, for fear of damaging national unity, the unity of the grave; a system in which the bully or the corrupt may not be denounced or the underdog uplifted because nobody will dare risk being called a Red. . . . Should the day come when we are afraid to pursue each and every enlightened course of action because the Communists, for their own deplorable reasons are associated with them too, then Stalin will have won."

Amen.

NOBEL Prize Winner Thomas Mann has always been too formidable a figure for me to contend with. I have started on his major works time and again only to bog down both in the complexity of his writing and in the issues he raised. His newest book, however, is a different matter. In *The Holy Sinner* (Knopf, \$3.50) Mann takes a medieval legend of the birth, deadly sin, penitence, and miraculous accession to the throne of the blessed Pope Gregory, and weaves around it a story as rich and robust—and utterly, beautifully ironic—as any I know.

In this book a great writer seems to write for the sheer joy of it, and the result is a triumph of narrative art as well as a relief from the modern novel wherein someone sins and then spends 300 pages agonizing over it with the aid of a reformed cocaine addict and four psychoanalysts.

ONE of the great tragedies of the twentieth century was that of Woodrow Wilson, made all the more terrible by the fact that his personal tragedy was also his country's. Much has been written of Wilson's defeat, but John Morton Blum in *Joe Tumulty and the Wilson Era* (Houghton Mifflin, \$4.00), makes a fresh approach to it.

Here we have a political biography of Joseph Tumulty, Wilson's secretary, and a man on whom Wilson leaned for advice on practical politics. Dealing, as it does, with the political scene where Wilson was inept and uninterested, it does not give by any means a rounded picture of Wilson or his policies, but it is a sharp commentary on the area where Wilson manufactured—at least in part—his disastrous defeat on the larger issues of peace and the League.

Mr. Blum gives us a candid, well documented and admirably considered biography of a man who was a devoted public servant and a politician in the finest sense of the word.

O.C.S.

First-rate Maps

THE AMERICAN OXFORD ATLAS.

Edited by Brigadier Sir Clinton Lewis, OBE, and Colonel J. D. Campbell, DSO, with the assistance of D. P. Bickmore and K. F. Cook. Oxford University Press, 1951. \$10.00.

It took the editors five years to turn out this atlas of the world, and they are to be complimented on producing a highly useful tool. The project was sponsored by Oxford University and had the assistance of such agencies as the U.S. Board on Geographic Names and its British counterpart, and of our State Department, the British Foreign Office, and leading British and American geographers and cartographers.

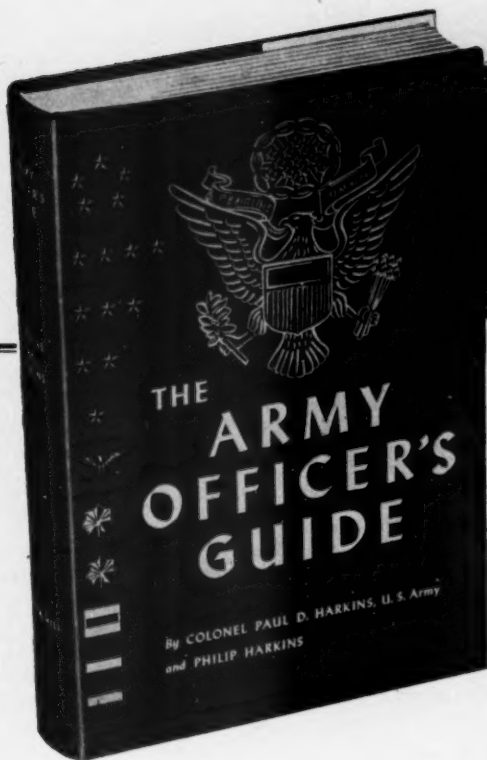
This is no rehashed collection. The editors began with blank paper and used new techniques developed during the war. Now they have the best executed collection of maps we have seen. Each map is in six colors, which allows twelve tints for showing altitudes ranging from 6,000 feet and more below sea level, up to 18,000 feet above sea level. When you look at these maps you see not splotches of color representing political divisions but actually the structure of the land as it diminishes to sea level. So no contour lines are necessary. Boundaries are shown by lines instead of color. Hand-lettering of all names has allowed greater accuracy in placing. And the use of color in names is novel: black for land names, blue for waters, red for roads, white for high elevations. And even canals and pipelines are included in this volume.

There are fractional and graphic scales for each map, with distances in miles on the margins. The editors have made it easy to compare proportions of one map with another, by adopting a system of even multiples (in millions) like 1:10, 1:4, 1:16. That's much easier to work with than other atlases I have used—good ones, too—which jump around with figures like 1:12½, 1:1¼, 1:48, and worse.

There are 120 pages of these maps, plus the usual section of distribution maps—for climate, population, vegetation, structure, land use, airlines, and so on—and explanations of the several projections. The gazetteer is a book in itself—almost a hundred pages of fine print, five columns to the page. That's a lot of names, when you consider the book measures 10½ by 19½ inches. Overall, it's a well printed job on good heavy chart paper the publishers began hoarding years ago. They say it will resist temperature changes.

I can find no complaint about the treatment given the maps of the United States, but I am baffled by the names applied to some of them. That titled "The Great Lakes" includes Maine to Minnesota to Arkansas to North Carolina. "New York" includes Maine to Michigan to Ohio to New Jersey. One showing Michigan to South Dakota to Kansas to

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Indiana is called "Chicago." But I suppose you can give a map any name, just as you name a battle or a war. In this atlas you can find what you want by using the keyed gazetteer like I did.—N.J.A.

Hand-to-Hand

KILL OR GET KILLED. By Lt. Colonel Rex Applegate, USA-Ret. Military Service Publishing Company. 316 Pages. 285 Photos and Illustrations. \$3.75.

One thing about warfare is that it's a downright dirty business. The days of the knights in shining armor and their rigid etiquette of the battlefield are long gone. General Matthew B. Ridgway summed up the current thinking on combat when he took command of the Eighth Army in Korea. Summing up the army's mission he said, "The job is to kill Chinese."

To accomplish such straight-out missions, the present-day soldier is armed with many fine weapons. But as we have seen in the action reports from Korea, notably the story "Bayonet Charge" which appeared in the June issue of *COMBAT FORCES JOURNAL*, combat often does develop in such close quarters and with such violence that the soldier must be prepared to fight with his fists or his bayonet, knife or anything else that is handy.

Kill or Get Killed is about as complete a manual on assorted mayhem as you could ask for. Colonel Applegate knows from his own personal experience with the OSS in World War II that hand-to-hand fighting is a ruthless business that knows no rules of conduct. This new edition of his manual on hand-to-hand fighting is designed to teach the soldier what he needs to know to protect himself and subdue his adversary in close quarters fighting.

Practically all phases of close combat are covered both in text and clear illustrations. Unarmed combat, both offensive and defensive, is discussed in the three opening chapters. Knife attack and defense, combat use of handguns and shoulder weapons, and methods of disarming opponents are also well covered.

The final chapters of the book enhance its usefulness by going over such subjects as prisoner handling and control, miscellaneous weapons and techniques, raids and room combat, elementary fieldcraft and training techniques and combat ranges.

Kill or Get Killed is completely practical in its approach. Not only is it clear-cut and comprehensive in its coverage of close combat but it is psychologically sound in its effort to help the soldier overcome his natural repugnance and fear of such combat. The material for learning the techniques is here and careful reading of the book should do much to build the soldier's confidence in himself in what is for many the most terrifying aspect of warfare.—R.F.C.

Cloak & Dagger

EPICS OF ESPIONAGE. By Bernard Newman. Philosophical Library, 1951. 262 Pages; Index. \$4.50.

Having long been a sucker for books on the subject, and having read most of the books by and about spies and their methods, I expected something when I saw this author's name. But I could have started with chapter 14, for up to there you only meet the same crop of clever agents who operated from Napoleon's time to World War I, and also some who would be classed as bumbler by today's standards—people like Major André, Mata Hari, Colonel Redl, Trebisch Lincoln and lesser lights in the spying and sabotage game. Their accomplishments and failures have already been written to death.

One chapter has thumbnail sketches of such American minor-leaguers as Lafayette Baker, Rose Greenhow, Timothy Webster, Belle Boyd, Crazy Bet, and others. And we are offered the Dreyfus case once more. The remaining chapters thrash around among such characters and subjects as Hitler's bunglers, the rumor racket, Yardley's code-cracking, flying saucers, the FBI, Soviet methods, Alger Hiss, Dr. Fuchs, the Russians in Canada, plain traitors, and the future of espio-

nage. Nothing on the Japanese. The stories seem to have been done hurriedly in a "shotgun" style with only superficial treatment. At the price asked for it, I looked for a much better product from this author, who certainly knows the business.—N.J.A.

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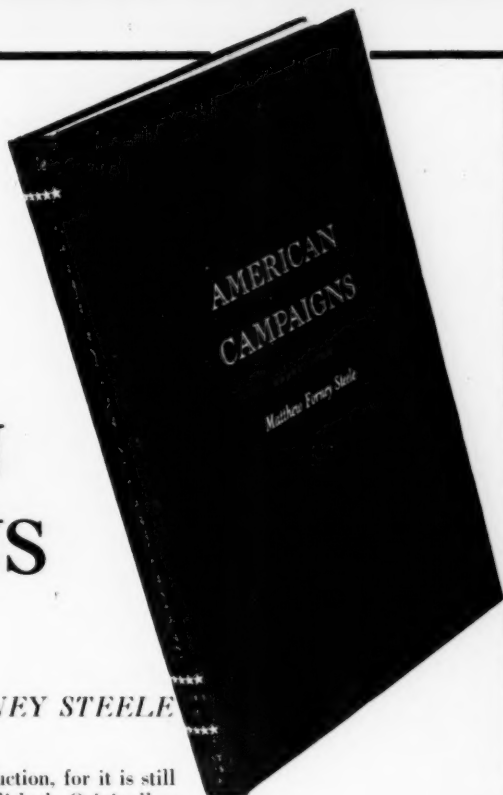
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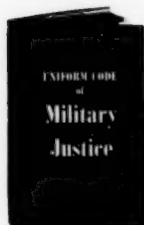
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